

R E P O R T
OF THE
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B O M B A Y ,
FROM
MAY 1, 1854, TO, APRIL 30, 1855.

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Board of Education.

April 30th, 1855.

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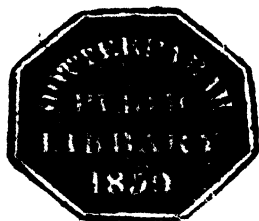
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TO THE RIGHT HONORABLE .

LORD ELPHINSTONE, G.C.H.,

Governor and President in Council,

BOMBAY.

MY LORD,

WE have the honor to lay before you a Report of the educational institutions under our charge for the year ending 30th April, 1855.

2. We beg to commence our report by expressing our

*Retirement from India of
the Honorable Mr. Warden,
President of the Board of
Education, and of Dr. Mc-
Lennan, the senior Member.*

deep sense of the great loss we sustained by the retirement from India of our President, the Honorable Mr. Warden, and of our senior Member, Dr.

McLennan; and we desire to record our testimony to the high value of their unremitting exertions in behalf of the important cause to which they devoted so much of their time and attention.

3. To Dr. McLennan, in particular, we feel that we are

Services of Dr. McLennan.

bound, in an especial manner, to express our feelings of grati-

tude for the able, zealous, and discriminating assistance we at all times received from him. We feel equally bound to remark, that he invariably took a distinguished part in our proceedings, and was ever earnest in furthering all measures having for their object the promotion of the educational interests of Western India. His long connection

with the department of education,—his experience of fifteen years as a member of our body,—and his consequent intimate acquaintance with the history and progress of Native education in this Presidency,—proved of the highest advantage in promoting the interests of our different institutions, and more especially of the Grant Medical College. His loss to this institution, in particular, will long be felt as peculiarly heavy. Connected for a quarter of a century with the cause of Native medical education, and having himself experienced personally the difficulties with which it was surrounded, his practical, and at the same time enlarged and enlightened views, proved of the highest value in guiding the arrangements of an institution, in the successful working of which he took the deepest interest. We feel, indeed, that Dr. McLennan has earned a high place among those who have laboured for the development and improvement of the Native mind.

4. We now proceed to our immediate object. In

Measures adopted by the Board for extending Education.

closing our last report, we mentioned that the Honorable the Court of Directors had recently made an addition of

Rs. 50,000 to the amount of the annual educational grant, and we stated that this increase would enable us to render assistance in certain zillahs, where, from want of means, we had previously been unable to lend a helping hand in establishing English schools; and that it would also enable us to extend our operations in various other directions. We propose to commence our report by briefly detailing the measures we have adopted for carrying out these objects. The measures more immediately required seemed to resolve themselves into the following heads:—

1st,—To render aid to such Native communities as we

had previously been unable to assist, in establishing English schools.

2nd.—To lay down conditions for the establishment of new Vernacular schools.

3rd.—To form a normal class, for training masters for our Gujeráti schools.

4th.—To increase the number of students in the normal class of the Poona College, under training as masters for our Maráthi schools.

5th.—To make additions to our vernacular class-books.

We propose to state briefly what we have done under each of these heads.

5. With regard to the subject of the 1st head, we must remind your Lordship, that in

Assistance to Native communities, for the purpose of establishing English schools.

our last report we brought to your notice, that certain Native communities had afforded proof

of a strong and sustained desire to make considerable pecuniary sacrifices for the sake of securing an education for their children, more especially in English. We mentioned, in particular, that the inhabitants of Khandesh had set a bright example to the other collectorates, by raising a large educational local fund, which,—pending an increase to the means at our disposal,—enabled them to establish an English school at Dhoolia. On receiving an increase to the annual grant, one of our first acts was to lend a helping hand to a province which had thus stood forward in promoting its truest interests. We therefore defrayed one-half of the master's salary; and we paid an equal amount towards the salary of the master of the English school at Tanna, the entire expense having previously been borne by the inhabitants.

6. In the same report we mentioned that considerable

English school established at Sholapoor.

exertions had been made by the inhabitants of Sholapoor to establish an English school, but that the attempt had failed, from the insufficiency of the local subscriptions, and from our not having the means to assist them. On receiving the increase alluded to, we reopened communications and expressed our readiness to defray one-half of the master's salary, provided the inhabitants would undertake to provide the other half. With the able assistance and active encouragement of Mr. Loughnan, the Collector, the inhabitants once held a public meeting and readily complied with these conditions. A school was accordingly established, with a monthly salary for the master of Rs. 100. To this post we appointed Balcrishna Sadashiva, a 1st class normal scholar, whom we mentioned in our last report as having distinguished himself as the best man of the year at the annual examination at the Elphinstone Institution in December 1853. The school was opened in August, and we have reason to believe is in a satisfactory state.

7. Kaira is now the only collectorate in this Presidency, which remains unprovided with an institution for imparting instruction in English. It is to be hoped, however, that the inhabitants will ere long follow the good examples recently set by Dhoolia and Sholapoor, and thus wipe away the reproach of its being the only zillah indifferent to the advantages and blessings of education.

8. Under the 2nd head, we have to state the measures we have adopted for the purpose of increasing the number of vernacular schools. The original principle, on which

Conditions for the establishment of vernacular schools.

these schools were established, was to defray the entire expense of supporting them out of the educational funds, and to restrict their establishment to such towns and villages as had a population of not less than 2,000 inhabitants. In carrying out this principle, we planted schools in the different collectorates,—so long as our means would allow,—on the written petitions of the inhabitants, and on the recommendation of our Superintendents. For some years these schools increased rapidly in number, for as the demands upon the educational grant were comparatively slight, the annual expenditure was considerably less than the amount of the grant, which, at that early date, was more than equal to our wants. But in course of time,—in consequence of the gradual extension of schools,—the expenditure began to exceed the amount of the grant, and pending the result of appeals to the Honorable the Court of Directors for an increase, Government decided that no more schools should be established, excepting such as were to be entirely self-supporting. In this state of matters, which lasted from 1852 to 1854, very few new schools were opened. On receiving an increase to the grant, therefore, it became necessary to view the subject in all its bearings, and to lay down the conditions, in accordance with which vernacular schools should in future be established.

9. In doing this, we thought it desirable to change the principle on which the older schools had been originally planted. We neither thought it sound policy that Government should bear the entire expense, nor did we think it fair that a village should be deprived of the privilege of having a school, merely because it could not number 2,000 inhabitants. We therefore decided that every village throughout the Presidency, however small, should be considered enti-

Same subject.

tled to a school, if the inhabitants would engage to defray one-half the master's salary, and to provide a school-room and class-books. We then laid down a scale of salaries for the masters, varying from ten rupees (the lowest amount) to forty rupees (the highest). Having adopted these views, we published a notification in English, Maráthi, and Gujeráti, in May last, stating the precise conditions on which vernacular schools would be established, and we sent copies into the districts of all the collectorates. Sufficient time has not yet elapsed for proving whether the conditions are precisely suitable in the present state of Native feeling in the districts, or whether they may require some relaxation; but, the result, so far, seems satisfactory, inasmuch as within ten months, applications have been made by thirty-five Native communities for the establishment of schools, in accordance with the rules of the notification. Twenty-five schools have already been opened, and arrangements are being made for opening ten more.

10. We next pass on to the subject alluded to under the the 3rd head, viz. the

Formation of a Normal Class for training Gujeráti Teachers.

formation of a normal class for training masters for our Gujeráti schools. Hitherto, the more modern teachers for these schools had been drawn from the students in the highest classes of the English and Vernacular schools in one or other of the four collectorates in Gujerát. But in anticipation of an increased demand for schools, we decided on establishing a normal class, to be attached to the English school at Surat, to be placed under the immediate tuition of a master specially selected for his fitness by Mr. Graham, the Superintendent of Schools in Gujerát, and to be under the Superintendent's general care and control. In every step we took, we availed

ourselves of the great experience and sound judgment of Mr. Graham, as well as of the intimate local knowledge, possessed by him, of the requirements of the province.

11. The size of the class was made to depend, in the first instance, on the probable extent of the demand for schools on the terms of the notification. A large class was evidently not required at first, for the liberality of the people of Gujerát on behalf of education has scarcely commenced its development. This has been sufficiently proved by the strong reluctance of the inhabitants of Surat, Broach, and Ahmedabad, to adopt any satisfactory measure for rendering their English schools more self-supporting. Still, the want of vernacular schools will now be more strongly felt by the people of Gujerát, in consequence of the qualifications required from candidates for admission into the public service. It was decided to limit the class at present to fifteen students, who, when qualified as masters, are intended to be employed in the larger and more important schools, the smaller ones which may be established, being provided for by selection from among the best students in the larger vernacular schools. The teacher selected for the class by Mr. Graham was Nandshankar Tuljashankar, an able assistant in the Surat English school, peculiarly well qualified for the post. The students were selected from among the most advanced and promising boys of the English and Vernacular schools in some of the four collectorates of Gujerát, and each receives, during his course of study, a stipendiary allowance of Rs. 6 a month.

12. The class was opened in September. It has not been fettered by rules, but free scope is left to the teacher to

Studies of the Class.

proceed as he thinks best, under the eye of the Superintendent, it being understood that the course of study is in the first place to comprise a sound grammatical knowledge of Gujeráti, and to include everything, mathematical and literary, which has yet been, or is likely to be published in that language. It is also intended to include, to a certain extent, a knowledge of astronomy and mechanics. The advantages of an acquaintance with the former are well pointed out in the words of Mr. Graham, who says:—“The Shástris and Astrologers are the grammarians and astronomers of the villages, among whom disputes not unfrequently arise, as the Hindoo ceremonies and festivals are regulated by astronomical observances; and the school-master who on such and similar occasions could reconcile the disputants, would not only acquire great influence with the inhabitants, but would be regarded as deeply learned in other subjects as in astronomy,” while without this knowledge he would sink in the estimation of the multitude to the level of an ordinary being. It is proposed to include a knowledge of mechanics, because an instructor of others ought himself to be acquainted with the common matters of every-day life connected with this as well as other subjects, and with the theoretic principles and laws by which they are regulated. It is also understood, that the art of teaching, so difficult in itself and of such great importance, is to be daily taught by the master, and practised by the students.

13. While deciding on the subjects to be studied, the medium through which these studies were to be pursued was naturally brought under consideration. It occurred to us, that if the medium were confined to Gujeráti, the future teachers from this school of training, when sent to remote

spots in the districts,—separated from the educated minds of the English schools,—and unable to pursue their studies from the want of vernacular works in the higher branches of literature and science,—would deteriorate year by year, till, in course of time, they would become little better than the older race of teachers. We therefore drew Mr. Graham's attention to this point, and suggested the advantage of their being made sufficient masters of English to be able to avail themselves of the resources afforded by works in that language, after commencing the business of life in their respective schools. It moreover seemed evident to us that, by this means, a link of communication would at the same time be kept up between themselves and the growing minds of this Presidency, which could not fail to prove otherwise than advantageous both to themselves and the country. There will be the less difficulty in carrying out these views, as one-half the students were selected from the English school at Surat, and were already, to a certain extent, English scholars.

14. At the suggestion of Mr. Graham, we have commissioned from England a variety of philosophical and mathematical instruments for the use of this class, including

Philosophical and Mathematical Instruments for the use of the Normal Class.

glass prisms, levels, a microscope, an air-pump, an electrical machine, a galvanic battery, and a model steam-engine. It was well remarked by Mr. Graham, "that with these instruments to illustrate the philosophical subjects treated of in some of our common school-books, we could hardly fail to create in our pupils an ardour and enthusiasm for such studies as would beyond doubt be attended with the best effects. How dry and unsatisfactory, for instance, however excellently the teacher performs his duty, it must

be for these young men to read of the formation of the rainbow, without ever having witnessed the decomposition of light by a glass prism, or of the pressure and elasticity of the atmosphere without ever having seen an air-pump, or an air-pump experiment."

15. The 4th measure we have to advert to, was the necessity of increasing the number of students in the normal class of the Poona College, under training as

Increase of Students in the Normal Class of the Poona College.

masters for our *Maráthi* schools. Here there was no difficulty. Your Lordship is aware, that on the remodeling of the Poona College in 1851, an important part of the arrangements was the establishment of a normal class for training teachers for our *Maráthi* schools. Twenty stipendiary students were admitted into the class, and as vacancies occurred by the transfer of the seniors to the master-ships of schools, their places were filled up after public examination and open competition. Four years ago, the number of twenty seemed ample for the probable requirements of our schools; but on receiving an increase to the annual grant, and on publishing the notification, alluded to in an earlier paragraph, which revised and facilitated the conditions on which schools were to be established, we thought it right to anticipate the probable increased demand for their establishment, by taking measures for providing masters. The most obvious plan was simply to increase the number of students in the training class of the college, the machinery of which was quite equal to the additional work. We therefore augmented the number from twenty to thirty; and as the demand for schools increases, this number can be still further augmented to any extent. But here, as in the recently formed corresponding Gujeráti

class at Surat, we intended to restrict the employment of the students, when thoroughly qualified for duty, to the larger and more important schools, the smaller ones being provided with masters selected from the assistant teachers, or best qualified students in the larger vernacular schools. This department is happily under the immediate control of Major Candy, the Principal of the College, who continues to devote himself to its successful working with the same unflagging interest and deep earnestness which have always distinguished him.

16. We now come to the 5th head, viz. the measures adopted for the purpose of

Additions to Vernacular School-books.

making additions to our vernacular school-books. On this

subject, our first step was to consult Major Candy and the Superintendents of Schools in the 1st, 2nd, and 3rd divisions, all of whom have long been personally as well as intimately acquainted with the requirements of our vernacular schools. The general view of these gentlemen was, that a few more vernacular school-books were required, but not many, a great variety of books not being so desirable as a *good series*. One of the Superintendents even questioned the expediency of augmenting, to any great extent, the labours of the teachers by introducing new class-books, more particularly as the recent introduction of the Civil and Criminal Regulations, Village and Talook Accounts, and the Joint Survey Report, as subjects of study, will for some time require much industry on their part to teach them with effect. Two of these gentlemen dwelt on the desirability of completing, in Maráthi, a series corresponding with McCulloch's, viz. 1st, 2nd, and 3rd "Reading Books," "Series of Lessons," and "Course of Reading," and they all suggested a few works, connected

both with literature and science, which seemed to be required in the more advanced schools.

17. Having given full consideration to the opinions of

these experienced men, we
Same subject. adopted such of their views for

supplying existing deficiencies as seemed capable of being carried into effect with the least delay, and with the greatest advantage. We therefore decided on having works prepared in the following order, so as to aid in completing, with existing works, a series in each of the subjects taught in our vernacular schools. *Reading Books.*—The first half of Lipidhara to be enlarged, and made into a 1st book for children; the second half to be enlarged, and made into a 2nd book; a 3rd book to be prepared, the Niti Bodh Katha being made the basis. These would correspond with McCulloch's 1st, 2nd, and 3rd Reading Books. Major Candy's "Vernacular Reader" would then correspond with his "Series of Lessons," and a book of the same kind, but of an advanced character, is to be prepared, so as to complete the series, by corresponding with the "Course of Reading." *Geography.*—To complete the series in this subject, Mahádeo Shástri Puránik, a Translation Exhibitioner of the Poona College, has recently translated the first part of "Sullivan's Geography Generalized," and after careful correction by Major Candy, an edition has just passed through the press. It will make a very valuable school-book. Major Candy, too, is himself preparing an extended work on geography. It has long occupied much of his attention, but owing to his many other engrossing occupations, some time must elapse before it will be ready for the press. *Morals.*—One good work is to be prepared. *Mathematics.*—Another work on algebra, and one also on plane and spherical trigonometry, being required, a transla-

tion of Haddon's work on the former, procured from the Dukshina Prize Committee; and the work of Gangadhar Pant on the latter, are to be carefully revised and prepared for the press, by Major Candy. *Natural Philosophy*.—"The Atmosphere and its Phenomena" to be also procured from the Dukshina Prize Committee, and revised and prepared for the press by Major Candy. A translation of "Chambers' Course of Natural Philosophy" is also to be made. *Political Economy*.—To supply the want on this subject, Krishna Shástri, the Assistant Professor of Vernacular Literature in the Poona Collegé, has recently compiled a work, and an edition is now passing through the press. The work is most creditable both to his ability and industry, and will prove a valuable addition to our books for the higher class of vernacular students. It was our intention to have the works, here named, completed as soon as possible, and published first in Maráthi,—translations being then made from this language into Gujeráti, and possibly into Canarese. We are aware, however, that much time must necessarily elapse before their completion, and we grieve to say that Major Candy's state of health will probably for a time interfere with the work.

18. On the completion of the works just named,—being those more immediately required,—it was our intention to keep in view the preparation of the following:—1st, a work on natural history, to be illustrated with cuts; 2nd, an abridgement of the Maráthi dictionary; 3rd, globes, prepared in the Maráthi and Gujeráti character, for the use of the larger schools; and 4th, a treatise on geometrical problems.

19. The Poona College Translation Exhibitioners are

Translation by the Poona College Exhibitioners.

also employed, under the eye of Major Candy, in making translations into Maráthi of

the following works :—

- 1, Taylor's Manual of Ancient History.
- 2, Murray's History of India.
- 3, History of Greece.
- 4, History of Rome.
- 5, The first six books of Euclid.

20. Besides these works, a translation into Gujeráti of

Translations into Gujeráti. "Grant Duff's History of the Maráthas," by Mohanlal Ranchodás,

is now passing through the press, under the immediate care of Mr. Harkness, who has always taken a deep interest in the work of translation, and who has so greatly improved the orthography and written character of this language. Another book, which is likely to prove useful in the Gujeráti schools, has also recently been completed and passed through the press, viz. a translation into Gujeráti by Máhipatrám Ruprám, and Nánábhái Haridás, —formerly students in the English school at Surat,—of "Selected Lives from Chambers' Exemplary Biography." It contains, among others, the lives of Copernicus, Galileo, Newton, Pascal, Herschel, Columbus, Cook, Mungo Park, Cuvier, Davy, Watt, and Franklin. Previous to its being sent to press, it was carefully revised by Ranchodás Girdhurbhái under the eye of Mr. Graham.

21. For the purpose of supplying the wants felt in the scientific course of our higher

Works to be prepared by Mr. Graham. vernacular schools in Gujerát, and more particularly in con-

nection with the course of study to be pursued in the normal class recently established at Surat, we have, on

Mr. Graham's suggestion, sanctioned the translation of three works into this language:—Hart's Treatise on Mechanics, Carr's Selections from Newton's Principia, and that part of the 2nd volume of the 12th edition of Hutton's Mathematics, edited by T. S. Davies, of the Royal Military Academy, which contains all the important particular and general properties of the conic sections, investigated geometrically. These works will complete the scientific series. Their translation has been specially entrusted to Mr. Graham, whose thorough knowledge, both of mathematics and of the Gujerāti language, naturally pointed him out as admirably qualified for the undertaking. His time, however, is so much engrossed by his more immediate duties, that a considerable period must necessarily elapse before even one work can be completed.

22. We have now briefly mentioned some of the more

*Measures for increasing
the efficiency of our Vernacular
Schools.*

prominent subjects, which occupied a good deal of our attention during the earlier months of the official year; but on its

becoming known that the functions of the Board, as Directors of Government Native education, were soon to be transferred to a Director of Public Instruction, we considered it desirable, for fear of embarrassing that officer, to refrain from originating new measures, and to confine our efforts to rendering existing institutions more efficient, and to carrying on the general duties of the department. In previous reports, we stated that the proper degree of efficiency, more particularly in the vernacular schools, could not be maintained without increased expenditure, as many of them required the aid of assistant teachers, whom in the then existing state of the funds it was impossible to appoint. On receiving the increase to the grant, however,

we were able to take steps for supplying this want; and by appointing assistant teachers to the larger schools, we believe we have done much towards increasing their efficiency.

23. The partially self-supporting system, which has of late been introduced in the establishment of all our newer schools; was originally forced upon us by circumstances; for our means were so limited that we were totally unable to bear the entire expense of supporting them. We are of opinion, however, that this system is based on the only sound principle on which any national scheme of education can be extensively and successfully carried out. All experience proves, that people do not truly value that which is obtained without some effort or some degree of self-sacrifice, and we decidedly think that the main object of Government should be to assist those alone who are willing to assist themselves. We are of opinion therefore, that, sooner or later, it will be desirable to remodel the system on which the older schools were established, and to make it incumbent upon all Native communities, who desire to retain the privilege of having a Government school, to defray one-half the expense. They would thus be placed on a footing with the inhabitants of the different towns and villages where schools have been more recently established, and uniformity of system and parity of advantages would thus be introduced. In our last report we mentioned that we had taken this subject into consideration, and that we had endeavoured to commence a reform, by calling upon the inhabitants of Surat, Broach, Ahmedabad, Ahmednuggur, and Rutnagiri, to come forward and engage to defray one-half the expense of their English schools. We regret to

say, however, that the inhabitants were not only very backward in replying to our appeals, but that when they did reply, their answers were unsatisfactory. There was the utmost reluctance shown by the more wealthy classes to provide for the educational well-being of their poorer countrymen. They mostly limited their efforts to making suggestions for increasing the monthly school-fee, and at the same time they expressed their anticipation of a diminution of attendance, were this step adopted. The correspondence on this subject had not terminated before we were made aware of the intended re-organization of the department, alluded to in the last paragraph. We therefore allowed the existing state of matters to remain unchanged, for fear of embarrassing the Director of Public Instruction; but we think it right to record our opinion of the desirability of effecting this measure of reform, first with the English schools, and subsequently with the vernacular.

24. In August we received a petition from certain inhabitants of Ahmednuggur,

Establishment of a low-caste school at Ahmednuggur.

praying for the establishment of a school for the education of low castes, and engaging to

defray one-half the teacher's salary, in accordance with the terms of the late rules. A school-room had been built by the petitioners, and the attendance of boys was calculated at thirty. The establishment of such a school was opposed to the prejudices of the richer and higher castes, and there was some difficulty in procuring a teacher on a moderate salary; but as the application was made in strict accordance with the conditions stated in the late notification on the subject, we readily complied with the request, and the school was opened in November. We merely mention the

subject, as it is the first occasion on which we have established a school for these castes.

25. On taking a general view of the state of our different institutions, and of the progress that has been made during the year in extending education, we believe we are justified in asserting that the results have been most satisfactory. We have already alluded to the increasing demand for the establishment of schools, and in another part of our report we shall enter into details on the state of our institutions. We would here simply remark, that the various reports we have received show that the different annual examinations, recently concluded, have been attended with satisfactory results. The state of our three principal institutions,—the Elphinstone Institution, the Poona College, and the Grant Medical College,—is as gratifying as the high character and attainments of their Principals and different Professors had led us to expect. Our English schools have increased in number, and, we believe, in efficiency. Our vernacular schools show a considerable increase in the number of students, and we have added to their efficiency by augmenting the number of teachers. Nearly every school, vernacular as well as English, has been examined during the year by one or other of the superintendents, while our largest and most important English school,—the one at Surat,—has been recently examined by Professor Harkness, specially deputed for the purpose. On the energy and vigilance with which the system of inspection is carried out, depends the efficiency of the schools. With the exception of some among our vernacular teachers, we have great pleasure in bearing testimony to the ability and zeal with which the duties of our schools, generally, have been performed ; and

we cannot refrain from expressing our deep obligations, in particular, to the Principals and Professors of the more important institutions, and to the Superintendents of Schools, for the satisfactory results of the year.

26. As the introduction of education into the provinces of Sattara and Katiawar is a comparatively recent measure, we may state that the progress so far is very satisfactory.

Progress of Education in the Sattara and Katiawar Provinces.

Although our system was only introduced into the former province about two years ago, and into the latter still more recently, the schools are progressing well, and there is an increasing demand for more. For this encouraging state of matters we are mainly indebted to the energy, zeal, and influence of Mahádeo Govind Shástri and Bhogilál Pranwulubdás, the former the Superintendent of Schools in the 1st division, and the latter of those in Katiawar. Bhogilál Pranwulubdás is at the same time master of the English school at Rajcote, but during three months, recently, he was engaged in inspecting the different vernacular schools in the province, and on all occasions his efforts for the public good have been warmly supported by the political authorities.

27. During the Superintendent's tour, new vernacular schools were established at Mahna, Palitáná, Limdi, and Dhrángadrá, and on opening each, the Superintendent called a general meeting of the inhabitants in the presence of the Chief, and took an opportunity of pointing out forcibly the benefits and objects of education. He also collected the teachers of the indigenous schools on such occasions, and gave them correct explanations of his views, strongly recom-

Establishment of new Schools in the Province of Katiawar.

mending them at the same time to have their children educated in the Government schools, that they themselves might ultimately be enabled to introduce a better system into their own.

28. In our last report we mentioned that we had recently introduced the Civil

Introduction of Talook Accounts into the Maráthi schools, and both Talook and Village Accounts into the Gujeráti schools.

and Criminal Regulations as voluntary studies into the senior class of our English, Maráthi, and Gujeráti schools, Village

Accounts into the second class of our Maráthi schools, and the Joint Survey Report Rules into the second class of our English and Maráthi schools. We are happy to state that their introduction seems to be effecting good, and to be increasing the popularity of the schools. During the present year we have further introduced Talook and Village Accounts into the Gujeráti schools, and Talook Accounts into the Maráthi ones.

29. No increase has been made in the number of Native libraries during the

Reports on Native Libraries.

year; at least none have applied to us for assistance. Libraries, however, exist now at Ahmednuggur, Poona, Sholapoor, Belgaum, Sattara, Rutnagiri, Sawunt Waree, Tanna, Surat, Baroda, Ahmedabad, and Nasik, besides ten in Bombay itself. We have reason to believe that much interest is taken in most of these libraries by the different Native communities, and we have placed in the appendix the reports with which we have been favoured during the year on the state of the libraries at Ahmednuggur, Sholapoor, Nasik, Sattara, Rutnagiri, and Tanna. In addition to the set of maps and copy of each of our vernacular publications, which we formerly presented to each library,

we have during the year added a number of useful books in English.

30. Our finances are now for the first time for many years in a satisfactory state,

State of the Educational Finances. our expenditure being at last within the limit of our income.

In our report for 1851-52, we mentioned that our expenditure exceeded the amount of the annual educational grant by Rs. 19,681, and that we were in consequence compelled, pending the result of appeals to the Honorable Court of Directors for an increase to the grant, to strive by every possible means to reduce our expenditure within the limit of our income. In our report for 1852-53, we mentioned the measures which had been adopted with this end in view, and we showed that in carrying out these measures, and by maintaining a rigid adherence to economy in all directions, we had reduced the excess of expenditure over income to Rs. 10,877. In our last report, we showed, that by persisting in the same course of economy, our surplus expenditure was still further reduced to Rs. 6,826. We have now the satisfaction of stating that the Civil Auditor's last annual statement shows a balance against the annual grant, on 30th April 1854, of Rs. 709 only; and as an increase of Rs. 50,000 has been made to the grant, the Civil Auditor's statement for the year terminating 30th April 1855 will show, when received, a considerable balance in our favour. There is, moreover, a balance of Rs. 57,510 in favour of the educational funds, being the remains of the reserved fund, which was formed out of the unexpended portions of the annual grant of former years at a time, anterior to 1849, when the expenditure was less than the income.

31. We have now finished the few general remarks we

Total Number of Students. had to make on the more prominent events of the year, and we proceed to the more special object of our report, viz. to notice separately the state of the different institutions under our charge. Previous to doing this, however, we beg to give the following table, showing the total number of youths receiving Government education at the close of March 1855. Compared with the corresponding table in our last report, it shows an increase of 3,661 pupils.

ENGLISH COLLEGES AND SCHOOLS.

	No. of Students.
Elphinstone Institution	961
Poona College	502
Ditto ditto Branch School.....	148
Grant Medical College .,.,.....	71
Surat English School	380
Ahmedabad ditto	167
Broach ditto	58
Ahmednuggur ditto	75
Rutnagiri ditto	52
Tanna ditto	100
Dharwar ditto	62
Sattara ditto	94
Rajkote ditto	71
Dhoolia ditto	74
Sholapoor ditto	45
Total....	<hr/> 2,860

VERNACULAR SCHOOLS.

No. of Students.

<i>1st Division.</i> —Collectorates of Poona, Ahmednuggur, Sholapoor, and Khandesh, and province of Sattara.	8,039
<i>2nd Division.</i> —Collectorates of Surat, Broach, Kaira, and Ahmedabad	3,403
<i>3rd Division.</i> —Collectorates of Tanna, Rutnagiri, Belgaum, and Dharwar..	5,628
In the province of Katiawar	1,258
At the Presidency	560
	<hr/>
Vernacular	18,888
English	2,860
	<hr/>
Total number of students	21,748

ELPHINSTONE INSTITUTION.

Establishment of Professors on 30th April 1855.

Principal, and Professor of English Literature, Logic, Mental and Moral Philosophy.....	JOHN HARKNESS, A.M.
Professor of History, Geography, Political Economy, and Induction.	R. S. SINCLAIR, LL.D.
Professor of Chemistry, Botany, and Geology.....	HERBERT GIRAUD, M.D.
Professor of Mathematics and Natural Philosophy	DÁDÁBHÁI NAOROZJI, Esq.

32. In our last report we mentioned that Mr. Reid, Professor of History and Literature, was in Europe on leave of absence. At the commencement of the official year, however, this gentleman resigned his appointment, on being called to the Bar. We have on several occasions alluded to the great value of Mr. Reid's services in the educational department, and it was with sincere and deep regret that we received his resignation. We may, perhaps, be allowed to express our gratification, however, at observing that Mr. Reid continues to take the greatest interest in everything connected with the improvement of the social condition of the Natives, and particularly with the well-being of the 'Students' Literary and Scientific Society, and the system of female education so nobly encouraged by its members.

33. In making arrangements, consequent upon this resignation, Mr. Sinclair became Professor of History, and was nominated as Professor of History and Literature.

tory, Literature and Political Economy.

Literature, and Political Economy. We mentioned in our

last report that Mr. Sinclair possessed very high testimonials in literature as well as in science, and that on Mr. Reid's departure for Europe we had nominated him to supply the vacant place. The result was so satisfactory, that we thought it desirable to place him permanently in charge of the classes, to which he had devoted himself with much earnestness and zeal.

34. To complete the arrangements, we gladly availed ourselves of the opportunity of

Appointment of Mr. Dádábháí Naorozji as Professor of Mathematics and Natural Philosophy.

confirming Mr. Dádábháí Naorozji as Professor of Mathematics and Natural Philosophy, the duties of which he

had been performing to our entire satisfaction for nearly two years. We feel sure that the distinction he has thus won by a long and laborious devotion to mathematical studies, and by an able discharge of his duties in the institution, will stimulate him to still greater exertions. Much will depend upon the result of this first nomination of a Native of India to be a Professor in the Elphinstone Institution. The honor conferred upon him is great, but the responsibility attached to it is still greater. It is now twenty-eight years since the subject of the Elphinstone Professorships first came under consideration, with the view of commemorating the high sense entertained by the Natives of Western India of the public and private character of the Honorable Mountstuart Elphinstone, on his retirement from the Government of this Presidency. At a public meeting, held in the library of the Native Education Society in August 1827, a resolution was unanimously passed, that the most appropriate and durable plan for

accomplishing this object would be to found professorships for teaching “the English language, and the arts, the sciences, and literature of Europe.” In the resolution, which was thus adopted, it was further declared that these professorships should bear the name of him in whose honor they were founded, and a hope was expressed that the happy period would arrive when Natives of this country would be found qualified for holding them. This expressed hope has ever been borne in mind. It was, therefore, with no ordinary feeling of satisfaction, that we felt ourselves justified in nominating Mr. Dádabhái Naorozji to the chair of Mathematics and Natural Philosophy—a measure so entirely in accordance with both the letter and spirit of the resolution.

35. The annual examination commenced on the 27th November, and continued till the 16th December, the examinations each day lasting from 11 A. M. till 5 P. M. The result was most satisfactory, and proved that the duties of the year had been faithfully and zealously performed. The report by the Principal will be found in the appendix. Its general arrangement, and classification of subjects, will be seen in its table of contents. It includes separate reports by the different professors on the subjects of their respective classes,—number and description of pupils in each class,—general comparative view of castes,—prize lists,—general results of scholarship examination,—scholarship examination questions, with selections from the answers,—tables of marks,—and a list of students in the College department. The report gives such full details of the state of the classes, in every division of the institution, that it seems quite unnecessary to enter here into any particulars.

Principal's Report.

36. We have reason to be fully satisfied with the progress and present state of the

Satisfactory state of Institution. institution in every department.

With the exception of one class in the school division, the classes all came out well; while in the College department, not only was the number of students greater than at any former period, but there was also a much larger number of successful competitors for the two higher classes of scholarships. At the previous examination, the number who passed the examination for these scholarships was eight; on the present occasion the number was sixteen. For this gratifying state of matters we are indebted to the unwearied exertions of the different professors, and more particularly to the long-trying services of Mr. Harkness, the Principal, whose experience of twenty years as an Elphinstone Professor has proved of the highest value to the institution.

37. The classes in the College department are in charge of four professors. Those in

College department.

English literature, logic, and

mental and moral philosophy, were taught throughout the year by Mr. Harkness; the classes in history, geography, political economy, and induction, by Mr. Sinclair; those in mathematics and natural philosophy by Mr. Dádabhái Naorozji; and those in chemistry and botany by Dr. Giraud. Happily, no change took place in any of these departments throughout the year, each of the professors named having been at his post the whole term. Full particulars on each of these subjects will be found in the separate reports of the professors, including the names of the text-books used by each. The results obtained from the examination papers on each subject were most satisfactory, notwithstanding the fact, which should always be

borne in mind, that the written answers were penned under the disadvantage of writing rapidly against time, in a difficult foreign language, and without the possibility of reference to books.

38. In our report for 1850-51, we mentioned that circumstances had convinced us of the necessity of modifying the

Scholarship Rules.

scholarship rules then in existence, and we gave in full the rules which we adopted in their place. Latterly, it again became apparent, that the rules then made required revision, as their working was not found lately to be so beneficial to the institution as was desirable. We therefore requested the Principal to suggest such alterations as he deemed requisite. In September, Mr. Harkness submitted a draft of new rules, to be substituted temporarily for those previously in existence. These rules met with our approval, and the scholarships for this year were awarded in accordance with them. A copy of the rules will be found in the appendix.

39. The main object, for which the scholarship rules were revised, was to define more clearly the conditions on which the different grades were

Number of Scholarships awarded.

to be obtained, leaving it to be afterwards considered whether the number of scholarships in each grade might not be more advantageously distributed. This subject is now under the consideration of the Principal. Twenty-eight stipendiary scholarships were awarded: viz. three 1st class normal, of the monthly value of 30 rupees each; six 2nd class normal, 20 rupees each; ten West, 15 rupees each; seven Clare, 10 rupees each; and two Gaekwád, of 10 rupees each. While the number of successful competitors for the 1st and 2nd class normal scholarships was con-

siderably larger than the previous year, the number for Clare scholarships was much smaller; but this was owing to the scholarship standard having been raised. A stipendiary scholarship was only awarded to those who obtained not less than 60 per cent. marks in the subjects prescribed for that scholarship, instead of being given, as formerly, to candidates getting 40 per cent. at the competition for the next higher grade. Thus, in the previous year, the Clare scholarships were all forestalled by the 1st year College students, instead of being reserved, as on the present occasion, for competition solely among the students of the candidate class. Moreover, 50 additional marks were assigned to language, the subject in which they were believed to be most deficient.

40. As the 1st class normal scholarship is the highest academical distinction which

Names of the successful Competitors for the highest class Scholarship.

can at present be obtained at the institution, we think it right to record, in the order of

merit, the names of the five students who passed the examination for this scholarship, by gaining upwards of 60 per cent. marks in the subjects, assigned:—Ganesh Dhondeo, Motilál Jivándás, Edálji Shápurji, Somnaráyán Nandnaráyán, and Mahipatrám Rupráám. The first on the list, Ganesh Dhondeo, obtained 75 per cent. of the estimated value of full answers in the studies of the year. He was recently selected, in consequence, as tutor to the young Chief of Moodhole. Motilál Jivandás has been appointed tutor to the sons of his highness the Rao of Kutch, and Edálji Shápurji has been made an assistant master in the Elphinstone Institution. The remaining two hold the stipendiary scholarship of that grade.

41. As your Lordship presided at the annual meeting

Presentation of Scholarships and Prizes.

for the presentation of scholarships and prizes to the students of the Elphinstone Institution, which was held in the Town Hall on the 20th March, it seems almost unnecessary to state that the twenty-eight scholarships, just alluded to, were on that occasion presented to the successful students. We may, however, take this opportunity of recording the names of the successful competitors for three valuable prizes which were also presented on the same occasion. The names, subjects, and conditions for these prizes were the following :—

I.—The Bell Prize, for the best essay on—“ The Cultivation of Natural Science necessary to the Development of the Resources of India.”

II.—The Sundarji Jivaji Prize, for the best essay on—“ The Constitution of the Universe, and the General Laws which regulate the Course of Human Affairs, are wisely and beneficially applied for the happiness of Man.”

III.—His Highness the Rajah of Dhar's Prize, for the student who obtained the greatest number of marks in the different subjects of examination for the 1st class normal scholarship.

42. The Bell prize was awarded to Nushirwanji Naorozji

The Bell Prize.

an assistant master in the Fort brarfeh school. His essay showed extensive reading, much originality, and considerable power of observation; but there were too many indications of hasty composition.

43. The Sundarji Jivaji prize was awarded to Parasha-

The Sundarji Jivaji Prize.

ram Vishnu, a third year's College student. The style was simple, and on the whole good, and the subject was

treated in a sensible manner, the views offered being such as would most readily present themselves to a reflecting person.

44. His Highness the Raja of Dhar's prize was won by Ganesh Dhondeo, who, by thus obtaining the greatest number of marks in the different subjects of examination for the highest class normal scholarship, proved himself the best student of the year.

45. The amount of fees received during the year terminating on the 30th April was Rs. 13,309, being a larger sum than was ever before received during the same space of time.

46. The total number of students at the close of March was 961, viz. 101 in the College department, 572 in the central school, and 288 in the branch schools.

47. In concluding our notice of the institution, we feel bound to record our obligations to the Rev. Mr. Fraser, Mr. Dosabhai Sorabji Munshi, Mr. Vináyek Wasudeo, and Mr. Krishna Shástri, and Mr. Krishna Shástri, for

their valuable and kind assistance at the examinations. The former gentleman gave some of the written examination questions in political economy and moral philosophy; the three latter were kind enough to assist in examining the Persian and Sanscrit classes.

POONA COLLEGE.

Establishment of Professors on April 30th, 1855.

Principal and Translator	MAJOR CANDY.
Professor of English Literature	W. DRAPER, A.M.
Professor of Mathematics and Natural Philosophy	REV. JAMES McDOUGALL.
Assistant Professor of Vernacular Literature	KRISHNA SHASTRI CHIPLUNKAR.
Assistant Professor of Natural Philosophy in the Vernacular	KERU LAKSHIMAN CHHATRE.

Sanskrit Department.

Professor of Rhetoric.....	NARAYAN SHASTRI ABHIYANKAR.
Professor of Logic.....	NARSING ACHARYA OK.
Professor of Grammar.....	DHOND SHASTRI DENGNEKAR.
Professor of Law	NILKANT SHASTRI BHAT.

48. The event of the greatest importance during the year was the resignation of the

Resignation of the Rev. A. G. Fraser, Professor of English Literature.

Professorship of English Literature, from 1st October, by the Rev. A. G. Fraser. Mr.

Fraser had been selected for this post in 1852, in succession to the late much lamented Mr. Green, and during the two years he held the appointment, he not only devoted himself with the greatest earnestness to the performance of the more immediate duties of his professorship, but he laboured with the utmost enthusiasm, and with great success, to inspire the students with a love for science as well as literature. He resigned his appointment in conse-

quence of having been selected to succeed Mr. Green as Principal of the Parsee Educational Institution, which happily presents a large field for the beneficial exercise of his talents and experience. In forwarding Mr. Fraser's resignation, Major Candy, Principal of the College, bore testimony to the value of his services in the following remarks, in which we fully sympathize :—"Professor Fraser has from the first been so assiduous in the discharge of his duty, so enthusiastic in teaching, so ready to do even more than could be required of him, so courteous in his intercourse with his colleagues, and so kind and conciliatory to all the students, that I cannot but feel great regret that the College is about to lose him. I feel it my duty to express to the Board the sense I have of the value of his services."

49. The appointment of a successor to the important

Appointment of Mr. Draper as Professor of English Literature.

post, thus vacated by Mr. Fraser, engaged our most earnest attention, and in selecting Mr.

Draper, we trust we have nominated a gentleman who will prove, by unwearying devotion to his duty, a credit to our selection. Mr. Draper had been nearly seven years in the educational department, and during a considerable part of the time had been teacher of the candidate class for Clare scholarships in the Elphinstone Institution. The Principal of that institution had on more than one occasion borne testimony to the efficient and highly satisfactory manner in which Mr. Draper had discharged his duties in that capacity, and the result of the scholarship examinations also proved that they had been ably and faithfully performed.

50. The annual examination took place in December.

Principal's Report.

On its conclusion Major Candy, the Principal, prepared his re-

port, which was forwarded to us in February, and which we beg to submit in the appendix. It includes separate reports by the different professors and assistant professors in the English and vernacular departments on the subjects of their respective classes, as well as written examination questions, specimens of answering in the English department, and tables of results. The report contains so full a detail of the state of the classes in every department of the College, that it seems quite unnecessary to enter here into any particulars.

51. It is gratifying to be able to state that the College continues in a satisfactory state.

Satisfactory state of the College.

There are differences of opinion between the late and present

Professor of English Literature as to the individual and general acquirements of the students in this department; and from want of personal knowledge of the classes, we cannot venture to pronounce a conclusive opinion on the subject. But, whatever may be the state of the literature classes,—whether in the highly gratifying state described by Mr. Fraser, or in the less satisfactory condition mentioned by Mr. Draper,—there can be no doubt that the mathematical, the vernacular, the normal, and the Sanskrit departments are in a most satisfactory state, and that the College is already exerting a decided and a beneficial influence on the Native mind of the Deccan.

52. In a previous part of our report we mentioned, that

Increase of Students in the Normal Department.

in anticipation of an additional demand for vernacular schools, we had increased the number

of students in the normal department of the College, under training as masters, from twenty to thirty; and it is a source of much gratification to find this important division in

an excellent state. We regard this department as one of the most valuable divisions of the College, for on its successful working will mainly depend the future well-being of the vernacular schools. It is, therefore, with peculiar satisfaction we are able to state, not only that Major Candy continues to preside over it with the greatest interest and earnestness, but that his exertions are most ably seconded by Krishna Shástri and Keru Lakshiman, the Assistant Professors of Vernacular Literature, and of Natural Philosophy in the Vernacular.

53. The following table will show the number of stipendiary, paying, and free students in the College, at the close of March, exclusive of 148 boys in the branch school :—

No.	Departments.	Stipendiary.	Paying.	Free Students	Total Number in each Department.
1	Sanskrit department ..	10	8	89	107
2	English ditto .	38	116	207	361
3	Normal ditto ...	25	...	9	34
Total ...		73	124	305	502

ENGLISH SCHOOLS IN THE DISTRICTS.

54. The English schools in the districts are now eleven in number, viz. at Surat, Rutnagiri, Ahmedabad, Ahmednuggur, Dharwar, Broach, Tanna, Sattara, Doolia, Rajkote, and Sholapoor, and we have arranged our reports on these schools according to the successive dates of their establishment, commencing with that at Surat, which is now

the oldest as well as the largest we have. The school at Sholapoor was established during the year under review. The total number of students in the eleven schools, at the close of March last, was 1,178.

SURAT ENGLISH SCHOOL.

Established 1842.

• *Master*.....Mr. GRAHAM.

Senior Assistant Master....MOHANLÁL RANCHODÁS.

Eight other Assistant Masters.

Pupils..... 380.

55. This school remains under the able management of Mr. Graham, who has had charge of it since February 1850. At the time of our last report there were 365 boys. This number, large as it was, has still further increased to 380. We regard this circumstance as a gratifying proof that the school has acquired that undoubted reputation for sound learning and increasing usefulness, on which the prosperity of schools in this, as in all other countries, so much depends.

56. The school was carefully examined by Professor Harkness on the 17th, 18th, and 19th of April, and he has since favored us with a minute report on its state. The pupils are divided into ten classes for arithmetic and mathematics as well as for English and general knowledge, but the classes are not composed of the same boys, nor is the number of pupils in the corresponding classes the same.

57. The 1st or highest class contained 21 pupils. Their studies in English had comprised portions of McCulloch's Course of Reading, Taylor's Manual of Ancient History, Murray's British India, Goldsmith's

History of England, and Clift's Political Economy, with mathematics and physical geography, the use of the globes, and No. IV. of the Government Regulations. On most of these subjects the students acquitted themselves satisfactorily. The reading, however, in this, as well as in the other classes, was somewhat faulty, giving an impression that the early education of some of the assistant masters had been defective. In mathematics, the studies of this class had comprised plane geometry, six books of Euclid with exercises, algebra to the end of quadratic equations, plane and spherical trigonometry, conic sections, the parabola, ellipse and hyperbola, geometrically. The examination of this class was conducted by means of paper questions, while the lower classes were being examined *vivâ voce*. Two questions were proposed on each of the four subjects of study. The solutions, mathematically viewed, were said by Mr. Harkness to be "extremely creditable"; but we regretted to find, from the specimens of written answers forwarded with the report, that the papers were disfigured by errors in spelling.

58. The 2nd class contained 34 pupils. Their studies in English had comprised portions of McCulloch's Course of Reading, Murray's British India, and the Revenue Survey Report, with grammar, geography, and problems on the terrestrial globe. The pupils read with intelligence and spirit, answered very creditably in geography and history, and explained the mythological and historical allusions. The Revenue Survey Report had been studied with great care, and, as an exercise in English, Mr. Harkness thought it had been attended with some benefit. He doubts, however, the propriety of making it part of a scheme of general education. In mathematics, this class was divided into two divisions, the studies of the 1st comprising plane

geometry, six books of Euclid with exercises, plane trigonometry with its application to heights and distances, and algebra to the end of quadratic equations. The studies of the 2nd division had comprised algebra to the end of quadratic equations, geometry, and four books of Euclid with exercises. The result of the examination of this class was very satisfactory. Mr. Harkness states :—"Both of these divisions acquitted themselves very creditably. A practical example in trigonometry was solved correctly by all of the 1st division except two, and nearly all the 2nd division brought out the right answers to two quadratic equations. Several geometrical deductions (of those contained in their text-book) were readily and accurately demonstrated."

59. Having specified the studies in the two higher classes, and stated the general proficiency attained, it seems unnecessary to enter into a detail of the studies and relative progress of the other classes. The result of the examination, upon the whole, was satisfactory; but we should be glad to see more attention paid by the junior teachers to correctness of pronunciation and fluency in reading, to parsing, and to the study of the vernacular, through the medium of which, geography, history, and other subjects, in the junior classes, might be taught with great advantage.

RUTNAGIRI ENGLISH SCHOOL.

Established 1845.

Master.....RÁMCHANDRA DÍNÁNÁTHJI.

Pupils 52.

60. No change has taken place in the management of this school since the nomination of the present master in

1847. It is divided into five classes, both for mathematics and for English. The studies of the year in the former comprised arithmetic, algebra, and geometry, and in the latter, grammar, geography, and history, with translation from Maráthi into English. We have every reason to be satisfied with the state of this school and with the conduct of the master, an experienced, attentive, and anxious teacher.

61. The school was carefully examined in January by Mr. Baker, Superintendent of Schools in the 3rd Division, and in concluding his report he makes the following remarks :—" The result of my examination shows that the school still maintains a good character, and the order which prevailed throughout during my examination exhibited a good state of discipline. The range of the studies of the classes has not been extended since I last reported upon the school, but all the last year's boys remaining in it have since then been promoted into higher classes. The two youths who composed the 1st class last year had since then left the school ; consequently those who are included in the 1st class, in this report, are boys who were last year in the 2nd. The improvement made by the 1st class subsequently to last examination, is the proficiency of that class, as shown in the printed return annexed, above what was reported the state of the 2nd class, 13 months back. The progress made by the 2nd and 3rd classes is correspondingly satisfactory. The classes below the 3rd are made up of boys who have entered the school since I last visited it, and they, also, for the time under instruction, have made satisfactory progress. Geography is the only subject which has not advanced correspondingly with other studies, but I think this deficiency is much owing to the want of globes in the school. Upon the whole, the school is in a

very fair condition, and creditable to the master. Hari Vishnu, the youth spoken of in my last report as a scholar of promising talents, entered the candidate class of the Elphinstone Institution in March last, but left it two months afterwards for the Grant Medical College, where he is now prosecuting medical studies. The most intelligent boy at present in the school is Abdul Kadur, a youth of about 15 years of age. Mr. Tucker, the Senior Assistant Judge, frequently visits this school, and the lively interest he takes in its proceedings is equally encouraging to the master and the boys."

AHMEDABAD ENGLISH SCHOOL.

Established 1846.

Master Mr. CURTIS.

Assistant Master PÁRVUTISHANKAR MANISHANKAR.

Pupils 167.

62. We mentioned in our last report, that in consequence of the nomination of Bhogilál Pránvalabdás to be master of the English school recently established at Rajkote, and Superintendent of the Vernacular Schools in the province of Katiawar, we had appointed Mr. Curtis to the charge of this school. No change has been made in the management since then, but Máhádavrao Narsing, the assistant master, having resigned his situation, we have recently appointed in his place Párvutishankar Manishankar, one of the junior assistants in the English school at Surat, strongly recommended by Mr. Graham.

63. The school was carefully examined in March by Mr. Graham, Superintendent of Schools in the 2nd Division. The number of pupils was twelve less than at the preceding examination. This is not a satisfactory feature in

a large and wealthy city like Ahmedabad. The result of the examination, however, was satisfactory. The school is divided into six classes, the 1st or highest containing twenty boys. The English studies of this class during the year comprised portions of McCulloch's Course of Reading, Murray's British India, Taylor's Ancient History, general geography, grammar, and translation into and from Gujarati. The mathematical studies of the class had been algebra, geometry, plane and spherical trigonometry, and parabola and ellipse. In the course of his report, Mr. Graham makes the following remarks on the 1st class:—

"The sections of ancient and modern history, here specified, have obtained considerable attention. The class-books in use in the school are Taylor and Murray, and when not carried beyond their contents, the pupils in general seem to experience little difficulty in replying to questions, especially if presented in the form to which they have been accustomed. It is desirable, however, that their knowledge of the mythology and laws of the Greeks, and their pronunciation of ancient names, be somewhat extended and improved. The tolerable ease and accuracy with which the English language itself is spoken and understood throughout the class, compared with last year's proficiency, in this respect, deserves to be noticed, and may doubtless be traced to the preference naturally given to English as the medium of communication between master and pupil, when a school exchanges a Native for a European teacher. The mathematical 1st class consists of two divisions, the 1st containing *three*, and the 2nd *nine* pupils. In the 1st division the studies have been Euclid, algebra, plane and spherical trigonometry, and conic sections from Rutherford's *Hutton*. The 'trio' declined attempting deducibles, but solved expertly several fundamental book questions,

and seemed tolerably well grounded in first principles, when cross-examined on their solutions. The spherical trigonometry had been taught (and radically too) by the assistant master, Máhádavrao Narsing, an arrangement which Mr. Curtis says was felt to be very convenient. In the 2nd division the studies are the same as in the first, spherical trigonometry and conic sections excepted. This section of the class also contains some pliant mathematical material, on which Mr. Curtis has the satisfaction to know skilled workmanship cannot possibly be expended in vain."

AHMEDNUGGUR ENGLISH SCHOOL.

Established 1848.

Master Mr. A. J. DA SILVA.

Pupils 75.

64. No change has taken place in the master of this school since its establishment in 1848. It was carefully examined on the 2nd, 3rd, 4th, and 7th of April, by the Superintendent of Schools in the 1st Division, and the result was satisfactory, particularly in the higher classes. There is a larger number of boys than at any previous period. The school is divided into seven classes for English studies, and into five for mathematics. The English studies of the 1st or senior class had comprised during the year McCulloch's Course of Reading, and portions of Clift's Political Economy and Taylor's Ancient History, with analytical parsing, Latin roots and derivations, composition, and geography. Hume's History of England and Tytler's Universal History had also occasionally been read. In mathematics, the studies had comprised simple and quadratic equations, and the first four books of Euclid,

65. In the course of his report on the state of the

school, the Superintendent makes the following remarks on the 1st and 2nd classes :—"The progress in reading is very satisfactory. Writing from dictation and memory taught with care and success. They give ready and intelligent answers upon the history of England, know a great deal of geography, can parse well, and have a good idea of etymology. Their answers in algebra and geometry were pretty accurate, but not ready. The boys of the 2nd class read remarkably well, and explained their lessons satisfactorily. The pronunciation of all was particularly good, and their knowledge of the facts of Marshman's History of India, particularly of the Mahomedan period, was very accurate. The knowledge which they exhibited of geography was very respectable, and their attainments in algebra and geometry were highly creditable to the master."

DIHARWAR ENGLISH SCHOOL.

Established 1848.

Master..... GOVIND LAXIMON.

Pupils..... 62.

66. In our last report we mentioned, that in consequence of the unsatisfactory state of this school, during the preceding two years, we had been compelled to place it under the management of a new master, Govind Laximon; and we expressed a hope, based on the high character given him by Major Candy, that he would succeed in retrieving the character of the school. In this hope we have not been disappointed. We have recently received a report from Mr. Baker, Superintendent of Schools in the 3rd Division, which shows that an improvement has taken place both in attendance and in the extent of studies. The school was

examined by Mr. Baker in December. It is divided into five classes for English studies, and into three for arithmetic, the first of these three studying also algebra and Euclid. The English studies of the 1st or senior class comprise portions of McCulloch's Course of Reading, Murray's History of India, Chambers's British History, and geography, with translation from Maráthi into English. The Superintendent reports that the master appeared to be attentive and zealous, and that good order was maintained in the school.

67. A considerable part of the expense of this school is borne by the inhabitants ; but we regret to observe that there is a want of regularity and punctuality in paying their subscriptions. In concluding his report, the Superintendent remarks:—"I am sorry to say that the subscription which partially supports this school has again been in peril, and that its preservation is entirely owing to the exertions of Dr. Forbes, the Civil Surgeon of the station, who in this, as in all former difficulties, has been the main supporter of the school. Mr. Ogilvy, the present Collector, has kindly promised to do also what his influence can effect towards keeping up the subscription list, and I think the interest now taken in it is sufficient to guarantee its continuance."

BROACH ENGLISH SCHOOL.

Established 1849.

Master..... KAYASJI EDALJI.

Pupils..... 58.

68. No change has taken place in the management of this school since its establishment in 1849. It was carefully examined by Mr. Graham, Superintendent of Schools

in the 2nd Division, at the close of March. Two years ago it had 95 pupils ; at its recent examination it had only 58. This is a very unpleasant feature. The cause of this diminution the Superintendent is unable to explain, but he expresses his opinion that "either the master or the people must be to blame, perhaps both." As this is one of the schools which is, at present, wholly supported out of the educational funds, both the inhabitants and the master must be made aware that some unpleasant measure will probably be adopted, should further experience prove that the school is not properly appreciated.

69. On the general state of the school the Superintendent makes the following remarks :—"The number of pupils in the 1st class is unusually small this year. The studies, too, are for the most part simple, and, though sufficiently numerous, are rather limited in the extent to which they have been pursued. In other respects, the results of the examination were unobjectionable. Reading exercises, grammatical constructions, and the analysis of words, have justly been reckoned primary objects of attention, and treated as such, though history and mathematical geography (from Sullivan's small volume, entitled 'Geography Generalised') would appear to have been the favorite studies. On the latter subject, questions relating to the earth's motions, and the productions of the tides and seasons, received prompt replies from the most intelligent boys, while in history, prompt and easy answering was the general characteristic of the examination. The mathematical studies have been simple and quadratic equations, and four books of Euclid, with 114 propositions from Luby's Geometry. Some of them are 'pucka' workers and demonstrators, when favored with book examples, and their ingenuity not over-taxed. Indeed the multiplicity of

subjects that engage the attention of young lads in their classes, during the limited periods they remain in small schools, afford them but little, if any time, for optional exercises of their ingenuity, while to give almost *vivâ voce* solutions of new problems requires a degree of judgment, and familiarity in the application of old principles, that can be acquired by discipline and experience alone. The 2nd class pupils learn reading, writing, and arithmetic, with grammar and geography, and are partially taught by the master, and partially by his head monitor. The remaining classes are wholly taught by monitors, under the master's superintendence. Government Regulations have been carefully attended to. Nine candidates from the Broach Collectorate presented themselves before the Committee at the recent examinations for vakeelships, and only two of the number (pupils from this school) were successful."

• TANNA ENGLISH SCHOOL.

Established 1851.

Master..... JAHANGIR HORMASJI.

Pupils..... 100.

70. No change has taken place in the management of this school since its establishment in 1851. It is divided into seven classes for English, and six for mathematics. The studies in the former comprise grammar, geography, and history, with translation from Maráthi into English; and in the latter, arithmetic, algebra, and geometry. We have every reason to be satisfied with the state of the school.

71. The school was carefully examined by the Superintendent of the 3rd Division in February, and the result was satisfactory. In concluding his report, Mr. Baker, makes the following remarks:—"The state of this school

stands in many points as it did last year, but in some respects it is more satisfactory. All lessons are being carefully taught, and good discipline is maintained. On a comparison between the present studies of the school and what comprised last year's routine, no advancement is observable in the exercises of the 1st class, but in others there appears some slight improvement. The absence of improvement in the 1st class is mainly attributed to the circumstance of many of last year's most advanced boys having in the meantime withdrawn from the institution, and those at present belonging to it being for the most part such as were then of the 2nd. A comparison between the condition of last year's 2nd class and this year's 1st will show the advancement made in learning by the pupils of the latter during the twelve months just elapsed. Grammar, geography, arithmetic, algebra, geometry, and translation from Maráthi into English, and *vice versâ*, are studies which have lately been prosecuted in the school with the same diligence as was observed at my last examination, whilst exercises on history and orthography of words have been somewhat more generally attended to. I remarked, also, that the 1st and 2nd classes had acquired some knowledge of the derivation of words, and of the force of prefixes and affixes. The general result of my examination reflects credit upon the master, who really appears an energetic and industrious teacher. As was the case the year before last, I was at this examination favored with the presence of Mr. Cameron, the Assistant Judge of Tanna, and greatly assisted by him in the business. Mr. Cameron was the only covenanted civil officer in the station at the time, and he kindly distributed the prizes awarded, which was done in the presence of the Native portion of the school committee, and the other respectable inhabitants of the place."

SATTARA ENGLISH SCHOOL.

*Established 1852.**Master*..... VISHNU MORESHWAR BHIRE.*Pupils*..... 94.

72. No change has taken place in the management of this school since its establishment in December 1852. We have reason to believe that everything is going on well, and that its present state reflects much credit upon the master. It was carefully examined in February by Mahádeo Govind Shástri, Superintendent of Schools in the 1st Division, and in his report he makes the following remarks:—"I devoted four days to a careful private examination of this school, and one to a public examination of this and the two vernacular schools in the city of Sattara, which was attended by a large number of respectable Natives, and four European gentlemen and ladies, who expressed themselves pleased with the state of the schools. The English and mathematical studies of the 1st class, during the year, were McCulloch's Course of Reading, the whole; Murray's History of India, 3 chapters; general geography of the four quarters of the world, and the particular geography of India; Catechism of the History of Maráthas; Reid's Grammar; the whole; use of the globes; principles of astronomy; Latin and Greek roots from the appendix to the Course of Reading; parsing; dictation, and translation; Regulation XIV. and the Joint Report on the Survey and Assessment in the Bombay Presidency, and composition; simple and quadratic equations, and first book of Chambers's Plane Geometry. The examination of the two upper classes, taught by the head-master, Vishnu Moreshwar, I cannot but consider, on the whole, most satisfactory. The boys read remarkably

well, and all with correctness and a good pronunciation. The explanation given by the upper boys of what was read was highly satisfactory, and I formed a high opinion of their knowledge of English. The allusions, which occur in the course of their reading, had been carefully explained to them, and their translation into Maráthi was quite correct and idiomatic. The 1st class boys appear decidedly to show the greatest proficiency in British history. The answers have generally been most faithful, and the boys appear to possess a full and comprehensive knowledge of this subject. Their answers in geography and grammar were generally correct, and evinced considerable familiarity with the subject. In algebra and geometry, the first two boys of the 1st class displayed considerable skill, and did great credit to their master. I was much pleased to observe that there was a marked improvement in the lower classes of this school, which were unfavorably reported on in my last report. The manner in which the different classes read and explain their lessons is very fair, and their answers to the questions in grammar and geography, as far as learnt, were good. In pronunciation and comprehension of the subject, there was great improvement compared with last examination, and the interest of these classes appeared to be promoted by the co-operation of the assistant master and monitor, who appear to have discharged their duties with diligence and attention during the last year. The monitors in the Missionary school, who come every morning to learn with Vishnu Punt, and pay for it, passed a very creditable examination in Mill's Political Economy, in which they had advanced to the end of production. Nothing can be more cheerful than the moral aspect of this school. The boys obviously take pleasure in their work, and are anxious

to improve. The school has become very popular with the parents, and I have great pleasure in recording the impression I have received of the zeal and ability with which Vishnu Punt manages it."

DHOOLIA ENGLISH SCHOOL.

Established 1853.

Master.....NÁRÁYAN BALÁL.

Pupils..... 74.

73. This is the only English school which has not been examined during the year. It is within the circle of the 1st division, but the time of the Superintendent has been so fully occupied by his long tour through the province of Sattara and the collectorates of Poona, Ahmednuggur, and Sholapoor, as not to admit of a visit to Dhoolia. We have reason to believe, however, that the school is in every respect going on well.

RAJKOTE ENGLISH SCHOOL.

Established 1853.

Master.....BHOGILÁL PRANWULUBDÁS.

Pupils..... 71.

74. No change has been made in the management of this school since its establishment in October 1853. It is in charge of an able man, who, in the words of Mr. Graham, raised the English school at Ahmedabad "from nothing to 170 pupils," and whose experience, acquired during seven years' service at that station, has proved of great value at Rajkote. The school has only been a year and a half in existence, yet the progress which has been made in this short period may be regarded as doing

great credit to the master. The successful progress is said by Bhogilál himself to be greatly owing to the industrious habits and taste for learning, acquired by the boys while at the vernacular school. The school is divided into four classes, the studies of the 1st or senior comprising grammar, arithmetic, geography, algebra, and geometry. The public exhibition was held in the new school-house, in the presence of a considerable number of Europeans and Natives, including among the latter the young Chiefs of Nagnesh, Chuda, Gondal, Laktar, and Vankaner.

SHOLAPOOR ENGLISH SCHOOL.

Established 1854.

Master..... BÁLKRISHNÁ ŠADÁSHIVA.

Pupils..... 45.

75. Having in a previous part of our report mentioned the particulars connected with the recent establishment of this school, we have but little to add here. It was opened in August. It was examined by the Superintendent of Schools in the 1st Division in December, and though it had been so short a time in existence, the Superintendent reported that the progress made by the boys during that brief period, was such as to reflect great credit on the persevering exertions of the master.

GOVERNMENT VERNACULAR SCHOOLS AT THE PRESIDENCY.

76. These schools are six in number ; viz. four Maráthi, one Gujaráti and one Hindustáni. At the time of our

last report, there were seven, but as the building, in which the central Maráthi and Gujeráti schools were accommodated, was let by the owner for the "Court of Small Causes," these schools were removed in July to a building in Kavel, formerly occupied as the institution of the Free Kirk Mission. As the building was large enough to contain the boys of the Paidhone Gujeráti school also, we closed this school, and the number was in consequence reduced from seven to six.

77. The schools remain under the superintendence of Mr. Harkness, by whom they were recently examined. They contain 560 boys, being a considerable increase on the number at the previous examination. With the exception of one Maráthi school, they were in a satisfactory state.

78. We have on several occasions expressed our opinion that the aid of Government might safely be dispensed with in imparting what is strictly called *primary instruction* at the Presidency. Our Vernacular Schools are resorted to mainly by those who wish to acquire that amount of knowledge of the vernaculars, which is required by the regulations for admission into the Elphinstone Institution; but so great has become the anxiety to gain this admission, that the amount of vernacular proficiency required might be safely left to private enterprise. We have nevertheless refrained from closing these schools, because we ascertained that so great a change would be very distasteful to the bulk of the Native community, and in deference to their wishes and feelings we still maintain them.

VERNACULAR SCHOOLS IN THE DISTRICTS.

79. These schools, with the exception of those in Katia-war, are arranged in three divisions. The 1st division comprises the schools in the collectorates of Poona, Ahmednuggur, Khandesh, and Sholapoor, and in the province of Sattara; the 2nd division includes the schools in the collectorates of Surat, Broach, Kaira, and Ahmedabad; the 3rd division those in the collectorates of Tanna, Rutnagiri, Belgaum, and Dharwar. In the appendix will be found a return of the number of these schools in each division—when and where established—estimated population of the town or village—number of pupils, both as borne on the register, and as actually present at the examination—name, caste, and salary of the master—length of his service—date of examination—and brief remarks on the state of each school. Each division is in the immediate charge of a Superintendent, one of whose duties is to inspect annually every school it contains. Thus all our schools are subjected to a personal control, which is as vigilant and effective as the state of organization in the department, and the means at our command, will allow. The total number of boys in these schools at the close of March was 18,328.

FIRST DIVISION.

Collectorates of Poona, Ahmednuggur, Khandesh, and Sholapoor, and Province of Sattara.

80. This division remains under the superintendence of Mahádeo Govind Shástri, who was selected for this appointment in April 1852. He continues to perform his duty

with energy, earnestness, and zeal. . During the year under review he inspected 120 schools, including 53 village schools in the Purandhar districts of the Poona collectorate. He has been engaged in travelling through his extensive circle nearly ten months. He has recently submitted his annual report, containing minute details on the state and progress of the schools, as ascertained by personal inspection. The general result of his examinations was satisfactory. There is a considerable increase in the number both of schools and boys, and a decided improvement in the acquirements of the majority. In some of the districts there was a temporary diminution in the number of boys, chiefly attributable to the depopulation caused by the failure of the crops for two successive years.

81. Schools have been established during the year at Boree, Kuleh, Kullus, Indapoor, and Baramati, in the Poona collectorate; at Akolner, Nimon, Ahmednuggur, Ambay, and Vinchore, in the Ahmednuggur collectorate; at Talikote and Pangam, in the Sholapoor collectorate; and at Menewli, Limb, Butishirale, Kudegaom, Moholi, Viteh, Wagholi, and Watar, in the Sattara districts. The total number of boys in the vernacular schools of this division, at the time the Superintendent sent in his report, was 8,133, including 1,656 in the village schools of the Purandhar districts of the Poona collectorate. This number shows a very considerable increase on the previous year.

82. On the general state of the schools in the Sattara districts, the Superintendent makes the following remarks:—
 “I carefully examined all the schools, and am glad to state that they are making rapid improvement, both in point of number and of progress. The schools at Bijapur, Kurar, and Pandharpur, have considerably increased in number, and the two former have passed a very creditable examina-

tion in all the branches taught. The schools, No. 1 and 2, at Sattara, were found to be in excellent condition, and the result of their examination did great credit to their respective masters. I am very sorry to state here that the school at Wai suffered very much from the premature death of its late master, Bhaú Sakharam Joshi, who had laboured very hard to collect the school, and raise its efficiency and character. In a period of nearly one year and a half, he had taught his scholars grammar, geography, algebra, and 34 propositions of Hutton's Course in Maráthi, and in English so far as the Series of Lessons. The senior boy of his 1st class has been admitted as a stipendiary student by Major Candy in the school department of the Poona College, where he is giving satisfaction. This will clearly show how much Bhaú did for the improvement of the Wai school. Since his death, the school has decreased in number; but I feel confident that under the present master, who is equally competent with Bhaú, it will soon rise to its former condition. With three or four exceptions, the masters and assistant masters, appointed to take charge of the schools in the Sattara collectorate, are young men, well educated either in the college or the normal class, and do infinite credit to the Native professors of the College, and particularly to Major Candy, the Principal, who has been taking a deep interest in the vernacular department of the College. The rooms in which the operations of the schools are conducted at present are suitable and convenient places, and the school furniture in some schools very good."

83. With regard to the state of the schools in the four collectorates of his division, the Superintendent makes the following remarks :—" With regard to the general condition of these schools, I feel peculiarly gratified to report that a very marked improvement has taken place in most of the

schools during the past year. From my remarks on the state and progress of each of the schools accompanying the printed returns of their examinations, the Board has already seen, I trust, that the majority of the schools reported on have not only increased in number, but are in admirable discipline, and have attained a high standard of efficiency. The higher classes of almost all the schools read with ease and intelligence in books of general information, and show a power of attention and a readiness of comprehension which are among the most certain characteristics of good teaching. The system of getting lessons by rote has been discarded in every school, and the practice of making the boys familiar with the contents of what they read, by the rational process of repeated explanation and examination, which is more laborious to the master, but more inviting to the pupils, has been generally introduced into our schools. In grammar and etymology, enough progress is made to enable the most advanced to analyse the meaning of words, and the construction of sentences. Many of the boys can write a clear and sensible account of what they have been doing or reading. Some of the boys have obtained a remarkably accurate and extensive knowledge of geography, and it gives me great pleasure to state that the best of our masters, while teaching this important subject, have endeavoured to expose thoroughly the errors which exist among the Hindus as to the size and shape of the earth, the theory of the eclipses, and mounts Maroo and Lunka, which are believed to be made of gold, &c. In mental arithmetic, they answered without difficulty such questions as, what is the ratio of 72 to 81, what $\frac{2}{3}$ of 9, &c. Their answers, too, were explained in a way that showed they thoroughly understood the course by which the results were arrived at. In slate arithmetic, the boys of the highest

classes of the schools, Poona Nos. 1 and 2, and Ahmednuggur No. 1, have learned the whole of Hutton's Geometry, algebra to cubic equations, trigonometry, and mensuration of surfaces and solids, in which they showed a remarkable proficiency, and did great credit to their respective masters, Keshava Shivarám, Hari Rámchandra, and Wásudeo Bhikáji. In history, not only the answers, which consisted merely of an enumeration of important facts, were very correct, but those which required thought and reflection were, with few exceptions, satisfactory. It is very gratifying to state, that the best of our teachers, while giving instruction in this important branch, have endeavoured to direct the attention of their pupils to the perverted notion in regard to fate which pervades all classes of the vulgar, and the consequent uselessness of personal exertions, and to illustrate by examples, taken from history and the ordinary Hindu life, the ill effects of addictedness to different vices, and the happiness and prosperity which usually follow a life of virtuous exertion. The effect of this is very gratifying. Some of the boys of our highest classes feel the pleasure derived from gratifying curiosity, of looking forward to knowing more and more, and imparting their stock of information to others, who from their circumstances in life are unable to avail themselves of better tuition. The lower classes, also, in many of our schools, have been more carefully attended to, and the general result of their examination has been satisfactory. In our best schools, information of a varied and interesting character is communicated to the children composing the lower classes, and great ingenuity is shown in exercising their judgment."

84. We mentioned in our last report that Mr. Graham had introduced an excellent system of conducting the

examination of the schools through the instrumentality of the teachers—a measure which operated successfully in stimulating these teachers in the work of self-improvement. We drew the attention of the other Superintendents to the subject ; and Mahádeo Govind Shástri makes the following remarks on it :—“ I beg to state here, that the system I have followed from the beginning, regarding the mode of conducting examinations, has been in accordance with that of Mr. Graham, referred to in the Board’s letter No. 298, dated the 10th May 1854. The share which I take in these examinations depends very much upon the acquirements and ability of the teachers. I can judge better of the teacher’s skill and the boys’ attainments by remaining a spectator ; but owing sometimes to the timidity of some of the teachers, and more frequently to the desire of all parties to make the inspection as impressive as possible, I am often induced to conduct it without their assistance. The best of our teachers, such as Kesheo Shivaram, master of the school No. 1 at Poona, Naro Balcrishna, master of the Junar school, Lakshumon Joshi, master of the Nasik school, Ganesh Náráyán, master of the Kurar school, Kashinath Shástri, master of the Bijapúr school, Wásudeo Bhikáji, master of the Ahmednuggur school No. 1, and many others, I am happy to state, have got that rapid and vigorous mode of examination which awakens the attention of the children, and keeps it on the alert.”

85. On the recent introduction of the Civil and Criminal Regulations as subjects of study, the Superintendent says :—“ With regard to the studies of the Civil and Criminal Regulations, of Village and Talook Accounts, and the Joint Survey Report Rules, recently introduced into our schools, I have much pleasure in stating, that although no great progress has as yet been made in these branches,

their introduction, as well as the recognition of geography and history of India among the qualifications deemed necessary for official employment, have given a practical value to school education, and secured a regular attendance of many boys, even of the sons of Mamledars and Munsifs."

SECOND DIVISION.

Collectorates of Surat, Broach, Kaira, and Ahmedabad.

86. The schools of this division continue under the superintendence of Mr. Graham, who was nominated to the duty in June 1850. His experience of five years, by making him intimately acquainted with the condition and requirements of the schools, has proved of great advantage in every point of view. During the past season, he made his annual tour of inspection, and he has recently forwarded an able report, giving minute particulars of the state of each school, as ascertained from personal inspection. The general result was decidedly satisfactory. There is only a slight increase in the number of boys, but there is a marked improvement in the general range and extent of their acquirements, and in some of the schools the attainments are of a higher standard than they ever before reached. There is no increase, however, in the number of schools. The inhabitants of Gujerat are far behind those of the Deccan and Konkan in making the least effort or self-sacrifice for the purpose of educating their children.

87. As illustrative of the nature of the examinations made by the Superintendent, and of the attainments of the students in some of the schools in this division, we beg to quote the following remarks on the schools at Mota, Surat No. 1, and Surat No. 5. With regard to the former, the

Superintendent states :—“ I have never listened to a more satisfactory examination of a vernacular school, conducted by its own master, than the one held this year in Mota. In many of our schools more extensive courses are taught, but the superior excellence here, this time, consisted in the minuteness and accuracy with which every subject that had been studied had been made up for the examination. In history, grammar, geography, and the Memoir of Columbus, scarcely a question that could have been fairly put to the 1st class was omitted, while every lad, with a very few exceptions, answered his own questions. In geography, latitudes and longitudes, climates, heights of mountains, and lengths of rivers, were described in a manner that *far* surpassed my expectations from such juvenile characters, the eldest of them not, I think, exceeding 13 years.”

88. With regard to No. 1 at Surat, Mr. Graham remarks :—“ Two days were spent in examining this school. The examination of the 1st class, alone, occupied about three and a half hours, and was ably conducted throughout by the master himself. In geography, history, and biography, the best *viva voce* answering was about 80, and the average about 50 per cent. In algebra, geometry, and plane trigonometry, book questions alone were proposed, and were all accurately solved and perfectly understood, as a variety of cross-examination questions on these subjects were, with hardly any exceptions, replied to with great promptness and confidence. Tripuráshankar has greatly extended his own knowledge within the last year, and to this in particular are we indebted for the soundness of the teaching, and the advanced state of the studies in the higher classes. At no period of its past history was this school in nearly so flourishing a condition as at present, the numbers

'being now upwards of 70 in excess of what I have ever known them to be in Durgárám's time.'

89. On the school No. 5 at Surat, the Superintendent says :—" This master is brother to the master of the school No. 1, and it would be no easy matter to decide which of them is deserving of the highest commendation for their noble exertions in behalf of their respective trusts. 'Conversations on Natural Philosophy,' from a Maráthi translation by Hari Keshovji, have been studied here to a very praiseworthy extent, and though they are not able to undergo a very minute examination on subjects so new—not to say anything of the difficulty—to them, several correct notions have been acquired respecting the laws of motion, and the topics discussed in the first 150 pages of the astronomical section of the work. In this respect, this school stands at the head of all schools yet examined, but in pure mathematics and biography it is greatly inferior to the school No. 1, above alluded to."

90. In our last report, we detailed the system pursued by Mr. Graham in conducting the examinations through the instrumentality of the masters. In his recent report he says :—" The examinations were everywhere conducted as described in my last report, with this difference, that we were considerably more exact this time than on any former occasion. The practice of examining schools through the instrumentality of the Mehtajis themselves, like most other practices, is, in the absence of preventive measures, liable to abuse. An indolent man, for instance, with crude notions of duty, after having once familiarised himself with a brief course of mathematics, history, biography, &c., and acquired dexterity in the mode of examining classes on it, might feel disposed to view his attainments with too much complacency, and, resting satisfied with past exertions,

confine the attention of his future classes within limits too narrow and stationary to serve any very rational purposes. To guard in some measure against the occurrence of such contingencies, every successive examination should be rendered more minute and searching than its predecessor, always exhausting the resources of both master and pupils, wherever anything like coincidence might appear to exist between them, and the limits so ascertained marked as the starting-points from which to estimate future progress. With a view, therefore, to secure, as much as possible, for this system of examination, the advantages of which it is capable, we adopted the only alternative at our disposal, and unusually minute and extensive questioning, especially in the senior classes, was the almost universal characteristic of this year's examinations. In some schools, where time permitted, class-books were examined in from cover to cover. This was particularly the case in the school No. 1 at Surat, which has proved to be the third largest (pupils 201), and if not the first, certainly the second best taught school in Gujerát. For efficient teaching, both in junior and senior classes, as well as for large numbers (pupils 315), the precedence is perhaps due to the school at Nariad."

91. Mr. Graham then remarks that the masters of the schools, just named, can "boast of no superiority, as regards literary acquisitions, over several of their contemporaries, though they appear to excel them all in their capacities for close and persevering application to the business of their schools. Hard working alone, *carried beyond the limits of school hours*, has enabled them to rival with so much success (despite inconveniently large numbers), both in style of teaching and extensive courses, such men as Lálbhái Rapráṁ, of Ahmedabad, whose school must now surrender the pre-eminence for high attainments

which it has for the last few years enjoyed over its neighbours. It must be admitted that Lálbhái's is still the only vernacular school we have, in which the ancient histories of the Assyrians, Medes, Persians, and Grecians, are taught; but it cannot bear comparison with the schools at Surat and Nariad in mathematics and 'Natural Philosophy for Beginners,' or even in the modern histories of India and England. This contrast, somewhat unfavorable to Lálbhái, the best mathematician of the three, serves to show that our Mehtajis could and would produce larger results than they are even now doing, if means were adopted for increasing and strengthening the degrees of emulation existing among them. This might, perhaps, be effected by sub-dividing them into classes, according to the order of their attainments, and offering prizes of books to the teachers of each class who should produce the best and most extensively taught schools at the annual examinations, together with publication of their names in the annual reports of the Board of Education. Men wishing to make sure of pensions would certainly like to see their names printed in this volume." The subject, here alluded to, will perhaps receive attention from the Director of Public Instruction.

92. Mr. Graham makes the following remarks on the studies of certain schools:—"The schools in which *Gujeráti* and *scientific* studies have received proportionate attention, and been simultaneously carried to very encouraging lengths, are those at Nariad, Surat, Mahudha, and Dandooka, in which the subjects of study pursued are almost commensurate with the class-books yet printed in the language. In other first class schools, as No. 4 Ahmedabad, Ahmode, Mota, &c. *Gujeráti* have generally been found more cultivated than *scientific* studies, and this, too,

by a disproportionately greater number of the first class pupils, a policy which the paucity of mathematical intellect, found at any time in a class, might sufficiently justify. Some of the first class schools are also just now being closely pressed by schools of the second class, into which lengthy and difficult courses of study have been introduced and taught, with no mean measure of success. Of this description are the schools at Dholka, Mehmabad, and Matar, which promise fairly to be among our best schools next year. The most inefficient schools are those conducted by men about to be pensioned, yet they too can generally claim merit for having lately improved their numbers, and paid fees. Some of them also (Broach, Anklesar, and Olpad) have improved the condition of their classes."

93. With regard to the new studies recently introduced, Mr. Graham observes :—" The perfectly new studies of the year, which have never before been seen partially introduced, are '*Government Regulations*' and '*Natural Philosophy for Beginners*.' The History of British India is also quite a new study in at least two-thirds of the schools in which it is now read. It had, however, made its appearance, for the first time, in a few schools before last year's examinations. Of these new studies, '*Natural Philosophy for Beginners*' has been least generally adopted, owing, no doubt, to the paramount difficulty of the subject, the only preparation necessary for students of law and history being a knowledge of the language in which they are to be studied. In the schools at Mahudha and Surat Nos. I. and IV., natural philosophy has been taught with most success. The volume itself, however, is found fault with by some of the masters, for though it abounds in practical illustrations of the principles which it enunciates, it everywhere refrains from attempting their demonstrative proofs, the *sine quâ non*

of the mathematician. We expect, however, shortly to have the pleasure of removing all such grounds of complaint on the part of our scientific Mehtajis, by placing in their hands Gujaráti translations of Hart's Elementary Mechanics and of Carr's Newton's Principia, which have lately been sanctioned by the Board." In a previous part of our report we alluded to the subject of these translations, which have been specially entrusted to Mr. Graham himself.

THIRD DIVISION.

Collectorates of Tanna, Rutnagiri, Belgaum, and Dharwar.

94. The schools in this division continue in charge of Mr. Baker, who was appointed Superintendent in November 1851. Unlike the Superintendent of the 2nd Division, who is also master of our largest English school, Mr. Baker has no other duty to perform. His whole time and attention are devoted to the important work of superintendence. During the greater portion of the year, therefore,—like the Superintendent of the 1st Division,—he is continually moving about through the districts of the four collectorates, staying one, two, or more days at each school, regulating the number according to the size, character, and importance of the different schools, and the greater or less necessity for a prolonged personal inspection.

95. Mr. Baker has recently forwarded his annual report, and has given minute details of the state of each school, as ascertained from personal inspection. We consider the general result very satisfactory. There is a very considerable increase in the number of boys, and there is also an increasing demand for new schools, but not to so great an extent as in the 1st division. Schools have been

established during the year at Hookeri and Chikodi in the Belgaum collectorate, and at Ooran and Wazen in the Tanna collectorate. Arrangements also are being made by the Superintendent for opening several more, in accordance with the late rules, but as the demand for schools increases, so also does the difficulty of providing teachers.

96. The Superintendent states in the course of his report:—"We have, in the results of the workings of the year just expiring, strong evidence that the efforts of Government to improve Western India are no longer looked upon by the Native community in that suspicious light in which it was formerly the custom to regard them, and no longer felt by the public as an imposition upon the people, threatening, as was once extravagantly imagined, both their liberties and their religion. Objections to the Government scheme are everywhere disappearing, and a desire for knowledge is springing up in the place of prejudice."

97. With regard to the increasing number of boys, Mr. Baker makes the following remarks:—"My last report exhibited attendance at schools to be gradually increasing. I am happy to be able now to show a still further improvement in this respect. The increase shown last year upon the one preceding it was, in the 47 schools then in operation, 542 boys, as collected from the registers of the different schools when I successively visited them. The result of my late tour of inspection is much more satisfactory, and exhibits a further increase, during the last year, in the same number of schools, of no less than 793 boys. The schools in which attendance has most considerably increased are Dharwar Maráthi, 84 boys; Savadati, 84 boys; Kalian, 73 boys; Belgaum Maráthi, 61 boys; Panwel Maráthi, 55 boys; Nowlgund, 46 boys; Rutnagiri No. 1, 45 boys; and Hubli Canarese, 40 boys. Increase

of attendance upon last year's numbers has taken place in no less than 36 schools, a falling off in 11. Aggregate increase is 948 boys, decrease 155, which leaves a balance of 793, the excess of attendance this year over the last. The whole number of boys receiving instruction this year, in these 47 schools, was found by the school registers to be 5,666, which gives an average of 120 boys to each school. This estimate does not include the schools lately established, but they are all, with one exception, beginning well."

98. With reference to the difficulty of procuring qualified teachers, Mr. Baker says:—"Very many of these schools require assistant masters, and for most of them there are no suitable parties available. Educational employment is generally objected to by all who are not pressed by necessity to accept it, and even Pantojis themselves I have known to refuse it for their relatives. There is no lack of applications for these appointments, but there is a great scarcity of them from eligible parties. I apprehend much difficulty on this head shortly, on account of the increasing demand for schools, and I propose, as soon as this report is dispatched, to lay the matter fully before the Board." The promised communication has not yet been received, but it will no doubt meet with much consideration from the Director of Public Instruction. Mr. Baker further remarks on the same subject:—"Another trouble is beginning to arise in the difficulty of procuring masters for small schools established under the new rules, doubts being entertained of the punctuality of the villagers to pay their half of the salary; and I have already had to use much persuasion to induce assistant masters to accept them. As yet, I have received no official complaint of this character from any quarter, but should any be made, it will be necessary to adopt speedy measures for correcting the evil; for

I think it quite as important for the success of an educational scheme to protect good masters against disappointment of this nature, as it is to secure good masters for schools. If masters are disappointed of their earnings, they will naturally feel dispirited, and their energies will undoubtedly flag in consequence."

99. With regard to the relative progress of the schools, Mr. Baker makes the following remarks :— " On the progress of the studies of these schools I have not much fresh to say. The schools Rutnagiri Nos. 1 and 2 had last year carried their highest classes through all the books supplied by the Board, except differential calculus and a portion of Hari Keshavji's ' Conversations on Natural Philosophy.' This year they have taken their classes equally as forward, and somewhat more perfectly. These two are still, though only in a slight degree, which is gradually lessening from the improvement going on in other parts, the best schools in the division. The other schools in which classes have done well, are Kalian, Vasye, Mohad, and Mahim, in the Tanna collectorate ; Dabhol, Harnai, Chiplún, Anjanwel, Palshet, Malgúnd, and Pawas, in the Rutnagiri collectorate ; Belgaum Maráthi, Belgaum Canarese, Sampgaom, Sadalga, Savadati, Bidi, and Bailhongal, in the Belgaum collectorate ; and Dharwar Maráthi, Nowlgund, Hangal, Bankapur, Ranibenúr, Kalghatgi, and Misricot, in the Dharwar collectorate. Tanna Maráthi, and Panwel Hindustáni, in the Tanna collectorate, and Khanapur and Jamboti, in the Belgaum collectorate, are schools, the state of progress of which does not at all please me. All the others that have been visited are of about average merit; they are not sufficiently forward to be called satisfactory, nor are they so backward as to be classed amongst the bad. I am, however, not satisfied with them, and certainly look

for improvement. The exercises which seem lately to have been conducted with better results than usual, in the best schools of the division, are those on essay-writing, history (of the Maráthas, of the British Empire, and of British India), orthography, geography, grammar, arithmetic, and algebra. Other subjects stand much as before, with the exception that the lowest classes appear on the whole to have been more carefully taught, which I ascribe to a more constant use being made of the slate in the exercises of these classes. Three years ago, it was not at all uncommon to find boys in the three last classes of a school, whose knowledge of even simple characters was imperfect. Now there is not one school of the division (excepting those lately established) where all the boys, down to the last class but one, are not thoroughly acquainted with them; and in some schools, classes of this rank (the last but one) are found perfect in the numeration table, and compound characters also, and able to write down without hesitation whatever within this range might be dictated."

100. On the subject of the vernacular periodicals supplied to the schools, the Superintendent says:—"The benefits derived by schools from the perusal of the periodicals, monthly sent by the Board, are becoming apparent in the improved style of reasoning remarked in the essays of the boys, and in the taste of the masters in their choice of subjects for this exercise. Last year the subjects given out for this lesson were usually connected with the Government of Maharáshtra, boys then being unable to write upon anything else. This year the exercise has been conducted on subjects of a moral tendency, and the character of the reasoning is improved."

101. At the conclusion of his report Mr. Baker gives a table, showing the number of vernacular schools and of

boys attending them, in his division, in March, and this we beg to subjoin. Compared with the corresponding table in our last report, it shows an increase of 1,119 boys :—

Collectorates.	Schools.				No. of School Boys on Register in March 1855.	No. of School Boys paying Fees in March 1855.
	Maráthi.	Canarese.	Hindustáni.	Total.		
Rutnagiri	18	..	..	18	2,136	1,864
Tanna	8	..	1	9	892	786
Belgaum	6	7	..	13	1,355	1,273
Dharwar	2	9	..	11	1,245	1,161
Total..	34	16	1	51	5,628	5,084

GRANT MEDICAL COLLEGE.

Establishment of Professors on April 30th, 1855.

Principal, and Professor of Medicine.	C. MOREHEAD, M.D. (Absent on Sick Certificate.)
Acting ditto	J. PEET, Esq.
Professor of Chemistry and Botany..	H. GIRAUD, M.D.
Professor of Surgery.....	J. PEET, Esq. (Acting Professor of Medicine.)
Acting ditto	G. R. BALLINGALL, M.D.
Professor of Anatomy and Physiology, and Curator of the Museum....	G. R. BALLINGALL, M.D. (Acting Professor of Surgery.)
Acting ditto	J. H. SYLVESTER, Esq.
Professor of Midwifery.....	W. C. COLES, M.D. (Acting Secretary, Medical Board.)
Acting ditto	C. C. MEAD, Esq.
Professor of Medical Jurisprudence..	W. CAMPBELL, M.D.
Acting Professor of Materia Medica.	E. IMPEY, Esq.
Acting Professor of Ophthalmic Surgery	H. J. CARTER, Esq.

102. We have to commence our notice of the Grant Medical College by expressing

Absence of Dr. Morehead, the Principal, on sick certificate.

our deep regret that Dr. Morehead, the Principal, was compelled by illness to proceed to Europe on sick certificate in May 1854, previous to the commencement of the last session. The College is thus deprived, for a time, of those most valuable services, which had been uninterruptedly devoted for nine years to its welfare. While recording our regret at Dr. Morehead's

departure, we feel bound at the same time to state that his ability and faithfulness, with which he invariably performed his duties, have uniformly commanded our highest respect. Dr. Morehead's services, however, are so well known to, and highly appreciated by Government, that we need not enlarge on the subject.

103. The College will continue to be deprived of its Principal for another session, in consequence of his having been selected for the performance of a special and important duty. In May 1854, when the necessity of Dr. Morehead's leaving India for a time became evident, our late colleague, Dr. McLennan, pointed out in a minute the great advantage which would result to the public interests in general, and to the cause of Native medical education in particular, by the employment of Dr. Morehead, while in Europe, in the preparation of a work on the diseases of India. Dr. McLennan not only stated his reasons for believing that a work of this nature was urgently required, but he also stated the grounds on which he believed Dr. Morehead to be peculiarly well-qualified for performing such a task. Dr. McLennan was not only the head of the medical service of this Presidency and Government Examiner of the College, but he had also been personally connected with Native medical education for a quarter of a century. Nobody in this Presidency, therefore, was so thoroughly qualified for forming a sound opinion on the subject, and we accordingly submitted his minute for the favorable consideration of Government, and of the Honorable Court of Directors. The proposal was supported by your Lordship in Council, and an additional twelvemonth's leave on special duty has been granted. Dr. McLennan's minute will be found in the appendix.

Employment of Dr. Morehead on special duty.

104. The nomination of Mr. Peet to officiate as Principal, during Dr. Morehead's

*Appointment of Mr. Peet
as Acting Principal.*

absence, happily ensured the continued success of the Col-

lege. Associated with Dr. Morehead, since 1845 in the working of the institution, he brought to the performance of his new duty, as Principal, a large experience, which could not well fail to prove of the greatest advantage; and it is a subject for congratulation that Mr. Peet's labours during the session have been attended with marked and gratifying success. The other arrangements, which took place consequent upon Dr. Morehead's departure, are recorded by the Acting Principal in his report.

105. The ninth session of the College was opened on

Number of Students.

the 15th June 1854, with an able introductory lecture by

the Acting Principal. The session was attended by 29 students, studying for the diploma of graduate, 31 student-apprentices, and 11 warrant medical officers, making a total of 71, a larger number than during any previous session.

106. The Acting Principal has recently forwarded his

Principal's Report.

report of the session 1854-55 just terminated, and this we

beg to submit in the appendix. It gives a clear statement of the events of the session, and we beg to refer your Lordship to it for full particulars.

107. The final or diploma examination was conducted

Final or Diploma Examination.

by the Inspector General of Hospitals, Dr. Don, who had been nominated to succeed

Dr. McLennan as Government Examiner. He was assisted by Surgeons Stovell and Arbuckle and Assistant Surgeon

Mead, as Assessors, and by the Principal and Professors of the College. The proceedings on the occasion will be found amply detailed in the report of the Examiner, addressed to the Secretary to Government in the General Department. This report, and the reply from Government, will be found in the appendix. The result of the examination was the granting of the diploma of graduate to each of the three candidates who presented themselves for examination. Their names will be seen in the report.

108. The Acting Principal mentions the change which has recently taken place in the professorship of materia medica, and we merely allude to the subject for the purpose of bearing testimony to the able and efficient manner in which Dr. Haines has performed the duties of the professorship, and of expressing our regret that circumstances should have deprived the College of his services. We have also to record the nomination of Assistant Surgeon Mead, of the European General Hospital, to be Acting Professor of Midwifery in the room of Dr. Coles, appointed Acting Secretary to the Medical Board.

109. The Acting Principal's report is so complete, as to render any further remarks by us unnecessary. He has alluded to the recognition of the College by the Royal College of Surgeons in London,—to the amalgamation of the appointments of Medical Storekeeper and Professor of Materia Medica,—to the increase in the number of lectures on a variety of subjects, consequent upon an increase in the number of professors,—to the more extended course of

Recent changes among the Professors.

Important points noticed by the Principal in his report.

instruction in botany, practical toxicology, and operative surgery,—and to the introduction of a course of lectures on ophthalmic surgery,—and it is gratifying to notice that the important subject of clinical instruction has not only received the same close attention which was always paid to it by the absent Principal, but that the system has been extended by the Professor of Medical Jurisprudence, who has given clinical instruction in mental disease in the wards of the Lunatic Asylum, of which Dr. Campbell, the Professor, is the Superintendent.

BOOK DÉPOSITORIES

OF THE ELPHINSTONE INSTITUTION AND POONA COLLEGE.

110. To form a collection of books, suitable for the different kinds of schools, was one of the original objects of the Native Education Society; and the several reports of that society exhibit in detail the origin and progressive increase of the depository of the Elphinstone Institution. The depository of the Poona College was formed in 1840, with the view of facilitating the distribution of books in the vernacular schools in the Deccan, and both depositories have to a considerable extent been supplied with books lithographed at the College press. Branch depositories have since been formed at Ahmednuggur, Nasik, Dhoolia, Sholapoor, Junar, Sattara, Surat, Broach, Ahmedabad, Ratnagiri, Belgaum, Dharwar, and Nariad. The six first named are supplied direct from the depository of the Poona College, the others from that of the Elphinstone Institution. We will now mention briefly the additions

which have been made to our stock of vernacular books since the date of our last report.

111. The following works were printed for us in Bombay, on account of the depository of the Elphinstone Institution :—

<i>Maráthi.</i>	No. of copies.
1, Moral Maxims	3,000
2, History of British India.	2,000
3, Arithmetic of Integers	1,500
4, Copy Slips	1,000
5, Rudiments of Geography	1,000
6, Outlines of Grammar.....	1,000
7, Sullivan's Geography, 1st edition.....	2,000

Gujeráti.

1, Catechism of the History of the Maráthas, 1st edition	1,000
2, Esop's Fables, 1st edition.....	1,000
3, Selected Lives from Chambers' Biography, 1st edition	1,000

112. The following vernacular publications were purchased during the year* :—

<i>Maráthi.</i>	No. of copies.
1, Girl's 1st Book	150
2, Course of Reading.....	250
3, Treatise on Cleanliness	100
4, Evils of Debt	50

* 114 copies of Dnyanprasarak and 48 copies of Chandrika, monthly periodicals in Maráthi, have been supplied monthly to the Maráthi schools; and 40 copies of Dnyanprasarak and 12 of Jagat Mitra, monthly periodicals in Gujaráti, have been supplied in a similar manner to the Gujaráti schools.

Gujeráti.

No. of copies.

1, Willoughby's Prize Essay	200
2, Opium Trade.....	12
3, Benefit of Life Insurance	12

113. The following works in Maráthi were lithographed at the press of the Poona College during the year :—

No. of copies.

1, Balmitra, or Children's Friend, 1st vol...	2,000
2, Arithmetic of Integers	2,000
3, Kuvaliyanand Satic	1,000
4, Poetical Extracts	500
5, Sanscrit Second Reader, 1st edition.....	500
6, Shakuntala Natak	500
7, Dialogues, Sanskrit and Maráthi	250
8, Amarkosh, 1st Kand	1,000
9, Advice to Spendthrifts	2,000
10, Dhatu Rupavali	1,000
11, Translation of Political Economy	1,000
12, Tales of a Traveller	2,000
13, Amarkosh, 2nd Kand	1,000
14, Mirror of Morals, Modi	2,000
15, Ditto ditto, Balbodh	2,000
16, Kittas, Modi.....	10,660
17, Lists of Books	27
18, Class Catalogues &c. for the College	1,500

114. We now close our report,—the last we shall be

*Functions of Board, as
Directors of Government
Education, to be transferred
to a Director of Public In-
struction.*

called upon to make, as our
functions, as Directors of Go-
vernment Native education in
this Presidency, are to be
transferred immediately to the

Director of Public Instruction; recently appointed in accordance with the instructions contained in a Despatch from the "Honorable Court of Directors, reorganizing the educational departments throughout India.* The Board of Education was formed in 1840. During the earlier part of the fifteen years which have elapsed, we were surrounded by the many difficulties which are inseparable from all early attempts at organizing an educational system, and during the latter part we have been fettered in our plans by the very limited means placed at our disposal, the annual educational grant, until lately, having been merely Rs. 1,25,000. To counterbalance these disadvantages, however, we have had two great sources of encouragement. *First*, we have uniformly received the warmest support from Government, for which we beg to offer our grateful acknowledgments; and *secondly*, we have ever met with the most hearty co-operation and zealous assistance from the officials in the department, the majority of whom, we are bound to state, have hitherto been remunerated rather with reference to the means at our disposal, than to their undoubted desert. To these two causes we are wholly indebted for the measure of success, which has attended our efforts in the cause confided to our charge. Rs. 1,25,000 could not be expected to do much; yet we have been able to effect something. At the time of the formation of the Board, the Government schools in the different collectorates were under the management of the local civil officers, or of the Superintendent of the Sanskrit College at Poona. These schools, and all educational institutions connected with Government, were then transferred to our charge. The number of such institutions, including

* The Despatch will be found in the appendix.

62 village schools in the Purandhar districts of the Poona collectorate, was 159; the number of students 6,702. They comprised the Elphinstone Institution and seven vernacular schools at the Presidency, the Sanskrit College at Poona, 3 English schools in the collectorates, 85 district vernacular schools, and 62 village schools. The number of institutions now is 267, containing 21,748 students. They comprise the Elphinstone Institution, six vernacular schools, and the Grant Medical College at the Presidency, the reformed College at Poona, 11 English schools, 194 district vernacular schools, and 53 village schools. The number of schools, therefore, has increased from 159 to 267, the number of students from 6,702 to 21,748. Native education, however, is still in its infancy. We regard ourselves as the mere pioneers of the extended system, which is now to be introduced under the brightest auspices and with ample means,—a system which will in no slight degree affect the future destiny of millions. This great scheme,—as comprehensive in its grasp, as it is minute in its details,—provides for every educational want which has so long been felt, and will enlist in its support, with scarcely an exception, every public and private educational body throughout India. We regard it as affording the strongest possible proof of the deep and active interest taken by the authorities in England in the well-being of the magnificent country committed to their charge.

115. We have still one duty to perform,—a duty as pleasing as it is imperative,—

Acknowledgment of the services of the Officials in the department.

viz. to offer our warmest thanks to the officials of the department. In expressing our heart-

felt acknowledgments to all, we cannot but feel that the greater length of service, and the larger sphere of duty, of

Mr. Harkness and Major Candy, make it incumbent upon us to dwell in an especial manner on the deep debt of gratitude due to these gentlemen by ourselves, as well as by the whole Native community. As Principals, during a long course of years, of two of our most important institutions,—the Elphinstone Institution and Poona College,—we are bound to express our belief that the present gratifying state of these institutions is mainly owing to the unflagging interest taken by these gentlemen in their welfare for nearly twenty years. Their services cannot be too highly appreciated, or too warmly rewarded. To Dr. Morehead, who has so ably presided over the Grant Medical College since its foundation in 1845, our warmest thanks are also especially due. He has matured and successfully carried out a noble scheme for communicating the blessings of medical education to the Natives of Western India. To the different Professors of these three institutions we are also deeply indebted for their unwearying labours. To the masters of our English schools we desire to offer our best acknowledgments, and more especially to Mr. Graham, who has presided with so much ability for the last five years over the one at Surat, the ready nucleus of a future college, should it be considered desirable hereafter to establish one for the province of Gujerát. It numbers nearly 400 students. To the Superintendents of Schools our best thanks are due for the ability and zeal with which they have performed their important duties, and we likewise cordially tender our thanks to the great majority of our vernacular teachers. We beg, also, in an especial manner, to offer our best acknowledgments to the able band of teachers and ex-teachers of the Elphinstone Institution, who, as members of the Students' Literary and Scientific Society, have thrown such a lustre

over the Government system of education, by their noble, disinterested, and successful efforts in behalf of *Female Education*.

We have the honor to be,
My Lord,
Your Lordship's most obedient Servants,

(Signed)	METCALFE LARKEN,	} <i>Members.</i>
,,	JUGONNATH SANKERSETT,	
,, .	BOMANJEE HORMASJEE,	
,,	BHAWOO DAJEE,	
,,	M. STOVELL, <i>Secretary.</i>	

Bombay, May 1st, 1855.

APPENDICES.

APPENDIX No. I.

STATEMENT OF EDUCATIONAL ACCOUNTS.

DR.

Board of Education in Account with Education.

CR.

1854. Apr. 30th	Rs. a. p.	1854. Apr. 30th	I. Establishments borne on General Grant, Interest on Funded Capital, Fees, and Subscriptions.	Rs. a. p.
Government Annual Grant (General)*.....	1,30,357 2 3		Establishment of Board of Education.....	7,281 15 6
Ditto do. for Poona College.....	25,500 0 0		Superintendence of Schools.....	10,370 12 10
Ditto do. for do. Depo- sitory.....	3,837 0 0		Government Examiner of the Grant Medical Col- lege.....	1,200 0 0
Ditto do. for Grant Medical Col- lege.....	27,448 6 5		Publication of Reports.....	722 3 6
Ditto do. for Sattara Province.....	7,000 0 0		Maps.....	468 0 0
Subscriptions.....	2,585 0 0		Gratuities to Masters removed from Service.....	3,927 8 8
Fees from Students in the Elphinstone In- stitution.....	13,194 0 0		Elphinstone Institution.....	54,718 1 8
Ditto do. in the Poona College.....	839 0 0		Vernacular Schools.....	4,610 7 9
Ditto do. in the English School.....	3,548 15 10		Poona College.....	9,694 0 0
PRIVATE ENDOWMENTS.†			1st Division, { English Schools.....	2,448 0 0
Interest on the Funded Capital.....	23,319 2 9		Do. { Vernacular do.....	17,289 11 4
			2nd Division, { English Schools.....	14,115 2 0
			Do. { Vernacular do.....	9,172 3 1
			3rd Division, { English Schools.....	1,709 15 9
			Do. { Vernacular do.....	10,528 10 2
			S. M. Country, { Vernacular do.....	658 12 3
			Books supplied to English Schools.....	6,748 15 2
			Ditto to Vernacular do.....	
			II. Establishments on Special Grants.	
			Poona College.....	25,222 9 9
			Ditto Depository.....	3,587 0 0
			Grant Medical College.....	27,448 6 5
			Sattara Province.....	8,074 7 3
			Balance.....	2,14,065 15 0
			Total.....Rupees	22,692 12 3
			Total.....Rupees	2,37,598 11 3

* The Government Annual Grant was Rupees 1,25,000 till 20th February 1854, from which date it was increased to Rupees 1,75,000.
† Elphinstone Professorship Fund, West Scholarship Fund, Clare Scholarship Fund, and Elphinstone Institution Fund.

(Signed) M. STOVELL, Secretary.
(Errors excepted)
(Signed) JOHN MCLENNAN,
METCALPE LARKEN,
JUGONNATH SANKERSETT, } Members.
BOMANJEE HORMASJEE,
BHAWOO DAJEE,

Bombay, 30th April 1854.

DR. Board of Education in Account with Government Annual Grant of Rs. 1,30,357-2-3. CR.

1854.	1854.	English Department.	Rs. a. p.
Apr. 30th Government Annual Grant*.....	1,30,357 2 3	Elphinstone Institution†.....	40,145 9 3
		Poona College.....	9,624 0 0
		English Schools.....	15,471 14 1
		Government Examiner of the Grant Medical College.....	1,200 0 0
		Publication of Reports.....	722 3 6
		Maps.....	488 0 0
		<i>Vernacular Department.</i>	
		Vernacular Schools at the Presidency.....	4,610 7 9
		Ditto in the 1st Division.....	17,289 11 4
		Ditto do. 2nd do.....	9,172 3 1
		Ditto do. 3rd do.....	10,598 10 2
		Books supplied to Vernacular Schools.....	6,748 15 2
		Superintendence.....	10,370 12 10
		Grants for School-houses.....	1,418 2 10
		Gratuities to Masters removed from Service.....	5,327 8 8
Balance.....	740 15 5		
	Total.....Rupees		1,31,098 1 8

* The Government Annual Grant was Rupees 1,25,000 till 20th February 1854, from which date it was increased to Rupees 1,75,000.

† In this Account, only that portion of the expense appears which is borne by the Government Grant.

(Errors excepted)

(Signed) M. STOVELL, Secretary.

Bombay, 30th April 1854.

(Signed) JOHN MCLENNAN,
 " METCALFE LARKEN,
 " JUGONNATH BARKERSETT,
 " ROMANJEE HORMASJEE,
 " BHAWOO DAJEE,

Members.

DR. *Abstract Account of Receipts and Disbursements, from the 1st May 1853 to the 30th April 1854.* CR.

86

	Rs.	a.	p.	Total
Balance of last year's Account..... May let 1854. Pr. 30th	12,274	5	9	
Annual Allowance from Government..... Interest on Funded Capital	20,000	0	0	
Fees from Pupils....	2,933	6	8	
Subscriptions	13,194	0	0	
Books sold.....	2,535	0	0	
	38,032	0	8	
	31,119	2	7	
Apr. 30th				
Salary of Secretary.....	2,400	0	0	
Ditto of European Master	4,112	8	0	
Ditto of Assistant Masters	11,554	0	9	
Ditto of Clerks	1,500	0	0	
Ditto of Peons, Watermen, and Carpenter.....	1,349	6	6	
* Contingent Charges..				
Government Agent's Commission and Fees.....	18	5	5	
Books awarded as Prizes	389	14	0	
Sundardi Jivaji Prize.....	40	0	0	
Two Bell Prizes	100	0	0	
Books for the Library of the Institution	37	8	0	
Ditto presented to Native Libraries	1,908	11	0	
House-rent for Branch English Schools.....	1,500	0	0	
Sundries	238	6	6	
Stationery.....	158	2	0	
Printing Report, Programmes, &c.	502	1	8	
Collector's Per-centage	786	6	10	
Repairs to the Institution.....	2,641	8	0	
School Furniture	243	0	0	
Premium on Fire Insurance Policy	375	0	0	
Clothing for Peons.....	65	0	0	
Depository.				
Books purchased for resale	16,818	8	0	
Biding Books for sale	292	10	0	
Charges for Translation.....	459	0	0	
Depositary's Commission	2,979	12	3	
Advance on account of School Material	1,516	5	10	
Government Vernacular Schools at the Presidency ...	.....	.....	.....
Invested in 4 per Cent. Government Promissory Notes ..	.....	.....	.....
Balance in the Bank of Bombay	15,790	6	6	
Ditto in hand.....	153	8	8	
(Errors excepted)				
Total.....Rupees	82,055	15	0	
Total..... Rupees	82,055	15	0	

Bombay, 30th April 1854.

We the undersigned have examined this Account, and do find a Balance in favor of the Elphinstone Institution Fund, amounting to Rupees fifteen thousand nine hundred and forty-three. annas fifteen, and pies two.

(Signed) JOHN MCLENNAN,
" METCALFE LARKEN,
" JUGONNATH SANKERSETT, } *Members.*

(Signed) BOMANJEE HORMASJEE, } *Members.*
" BHAWOO DAJEE, }

UR. *Abstract Account of Receipts and Disbursements, from the 1st May 1854 to the 30th April 1855. Cr.*

1854.		R _s .	a.	p.		R _s .	a.	p.		R _s .	a.	p.
May 1st 1855.	Balance of last year's Account ...	15,943	15	2	Apr. 30th 1855.	Salary of Secretary				2,400	0	0
	Annual Allowance from Govt.....	20,000	0	0		Ditto of European Masters				2,450	0	0
	Interest on Funded Capital.....	1,840	13	4		Ditto of Assistant Masters				13,241	7	3
	Fees from Pupils.....	13,309	0	0		Ditto of Clerks				1,829	12	4
	Subscriptions	1,485	0	0		Ditto of Peons, Watermen, and Carpenter				1,843	10	0
	Books sold.....	32,452	2	7		<i>Contingent Charges.</i>						
	Return of Premium on Fire Insurance Policy.....	140	10	0		Government Agent's Commission and Fees				14	0	10
						Books awarded as Prizes				243	13	0
						Sundari Jivaji Prize.....				40	0	0
						Bell Prize				40	0	0
						Books presented to Native Libraries				2,729	4	0
						Ditto for the Library of the Institution.....				35	12	0
						House-rent for Branch English Schools.....				1,560	0	0
						Sundries				214	1	6
						Stationery				65	14	0
						Printing Report, Programme, &c.				786	12	6
						Collector's Per-centage				739	10	10
						Repairs to the Institution.....				434	14	0
						School Furniture.....				116	12	8
						Premium on Fire Insurance Policy				375	0	0
						<i>Depository.</i>						
						Books purchased for resale				23,932	0	7
						Binding Books for sale				389	10	0
						Charges for Translation.....				351	5	4
						Depositary's Commission.....				2,078	15	0
						Advance on account of School Materials				1,558	12	6
					1855.	Government Vernacular Schools at the Presidency.....				.....	
					Apr. 30th	Invested in Government Promissory Notes .....				.....
						Balance in the Bank of Bombay.....				4,404	7	6
						Ditto in hand.....				109	2	8
Total.....Rupees		85,171	0	1	(Errors excepted)	Total.....Rupees				85,171	9	1

Bombay, 30th April 1855.

We the undersigned have examined this Account, and do find a Balance in favor of the Elphinstone Institution Fund, amounting to Rupees four thousand five hundred and thirteen, annas ten, and pies two.

(Signed) M. STOVELL, *Secretary.*

(Signed)	METCALFE LARKEN,	} <i>Members.</i>
"	JUGONNATH SANKERSETT,	
"	ROMANJEE HORMASJEE,	

APPENDIX No. IV.

WEST SCHOLARSHIP FUND.

Dr. *Abstract Account of Receipts and Disbursements, from the 1st May 1853 to the 30th April 1854.* CR.

1853.	Rs. a. p.	1854.	Rs. a. p.
May 1st Balance of last year's Account	145 9 3	Apr. 30th Scholarship Allowances	2,040 0 0
1854.		Government Agent's Commission and Fees	3 4 1
Apr. 30th Annual Allowance from Government.	1,124 0 0	Balance in the Bank of Bombay	2,043 4 1
Interest on Funded Capital	1,309 13 2		536 2 4
Total.....Rupees	2,579 6 5	Total.....Rupees	2,579 6 5

(Errors excepted)

(Signed) M. STOVELL, *Secretary.*

Bombay, 30th April 1854.

We the undersigned have examined this Account, and do find a Balance in favor of the West Scholarship Fund, amounting to Rupees five hundred and thirty-six, annas two, and pies four.

(Signed) JOHN McLENNAN,
 " METCALFE LARKEN,
 " JUGONNATH SANKERSETT,
 " BOMANJEE HORNASJEE,
 " BHAWOO DAJEE, } *Members.*

DR. *Abstract Account of Receipts and Disbursements, from the 1st May 1854 to the 30th April 1855.* Cr.

1854.		Rs. a. p.	1855.		Rs. a. p.
May 1st	Balance of last year's Account	536 2 4	Apr. 30th	Scholarship Allowances.....	1,822 8 0
1855.				Government Agent's Commission and Fees.....	2 3 9
Apr. 30th	Annual Allowance from Government.	1,124 0 0		Invested in 5 per Cent. Government Loan	500 0 0
	Interest on Funded Capital	913 9 10		Balance in the Bank of Bombay	2,324 11 9
	Total.....Rupees:	2,573 12 2		Total.....Rupees	2,573 12 2

(Errors excepted)

(Signed) M. STOVELL, *Secretary.*

Bombay, 30th April 1855.

We the undersigned have examined this Account, and do find a Balance in favor of the West Scholarship Fund, amounting to Rupees two hundred and forty-nine, and pice five.

(Signed) METCALFE LARKEN,
 " JUGONNATH SANKERSETT, } *Members.*
 " BOMANJEE HORNASJEE,

APPENDIX No. V.

CLARE SCHOLARSHIP FUND.

Dr. *Abstract Account of Receipts and Disbursements, from the 1st May 1853 to the 30th April 1854.* Cr.

1853.	Rs. a. p.	1854.	Rs. a. p.
May 1st Balance of last year's Account	63 10 0	Apr. 30th Scholarship Allowances	2,880 0 0
1854.		Government Agent's Commission and Fees	3 15 9
Apr. 30th Annual Allowance from Government.	1,632 0 0	Balance in the Bank of Bombay	2,883 15 9
Interest on Funded Capital	1,600 11 10		412 6 1
Total.....Rupees	3,296 5 10	Total.....Rupees	3,296 5 10

(Errors excepted)

Bombay, 30th April 1854.

(Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favor of the Clare Scholarship Fund, amounting to Rupees four hundred and twelve, annas six, and pie one.

(Signed) JOHN MCLENNAN,
 " METCALFE LARSEN,
 " JUGONNATH SANKERSETT, } *Members.*
 " BOMANJEE HORMASJEE,
 " BHAWOO DAJEE,

DR. *Abstract Account of Receipts and Disbursements, from the 1st May 1854 to the 30th April 1855.* CR.

1854.		Rs. a. p.	1855.		Rs. a. p.
May 1st	Balance of last year's Account	412 6 1	Apr. 30th	Scholarship Allowances.....	2,138 15 0
1855.				Government Agent's Commission and Fees.....	3 1 1
Apr. 30th	Annual Allowance from Government..	1,632 0 0		Invested in 5 per Cent. Government Loan.....	1,000 0 0
	Interest on Funded Capital	1,255 11 10		Balance in the Bank of Bombay	3,142 0 1
					158 1 10
	Total.....Rupees	3,300 1 11		Total.....Rupees	3,300 1 11

(Errors excepted)

(Signed) M. STOVELL, *Secretary.*

Bombay, 30th April 1855.

We the undersigned have examined this Account, and do find a Balance in favor of the Clare Scholarship Fund, amounting to Rupees one hundred and fifty-eight, anna one, and pies ten.

(Signed) METCALFE LARKEN, }
 JUGONNATH SANKERSETT, } *Members.*
 " BOMANJEE HORMASJEE, }

APPENDIX No. VI.

GAEKWAR SCHOLARSHIP FUND.

Dr. Abstract Account of Receipts and Disbursements, from the 1st May 1853 to the 30th April 1854. Cr.

1853.	Rs. a. p.	1854.	Rs. a. p.
May 1st Balance of last year's Account	509 11 9	Apr. 30th Scholarship Allowances	240 0 0
1854.		Government Agent's Commission and Fees	0 14 1
Apr. 30th Interest on Funded Capital	354 2 8	Balance in the Bank of Bombay	240 14 1
Total	863 14 5		623 0 4
		Total	863 14 5

(Errors excepted)

Bombay, 30th April 1854.

(Signed) M. STOVELL, Secretary.

We the undersigned have examined this Account, and do find a Balance in favor of the Gaekwar Scholarship Fund, amounting to Rupees six hundred and twenty-three, and pies four.

(Signed) JOHN McLENNAN,
 " METCALFE LARKEN,
 " JUGONNATH SANKERSETT,
 " BOMANJEE HORNASJEE,
 " BHAWOO DAJEE, } *Members.*

Dr. *Abstract Account of Receipts and Disbursements, from the 1st May 1854 to the 30th April 1855.* Cr.

1854.	*	Rs. a. p.	1855.	Rs. a. p.	
May 1st	Balance of last year's Account	623 0 4	Apr. 30th	Scholarship Allowances.....	240 0 0
1855.				Government Agent's Commission and Fees.....	0 4 0
Apr. 30th	Interest on Funded Capital	100 0 0		Balance in the Bank of Bombay	240 4 0
	Total.....Rupees	723 0 4		Total.....Rupees	482 12 4
					723 0 4

(Errors excepted)

Bombay, 30th April 1855.

(Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favour of the Gaekwar Scholarship Fund, amounting to Rupees four hundred and eighty-two, annas twelve, and pies four.

(Signed) METCALFE LARKEN,
 " JUGONNATH SANKERSETT, } *Members.*
 " BOMANJEE HORMASJEE.

APPENDIX No. VII.

DR.

RAJAH OF DHAR PRIZE FUND.

CR.

1853.	Received from His Highness the Rajah of Dhar.....	Rs. a. p.	1854. Jan. 14th	Paid for a Government Promissory Note No. 1383 of 1842-43, for Rs. 1,000, at Rs. 1-10-0 per cent. Premium.....	Rs. a. p.
Dec. 23rd	Interest on a Promissory Note, from 1st Aug. 1853 to 31st January 1854.	1,000 0 0		Interest on ditto from 1st August 1853 to 13th January 1854.....	1,016 4 0
	Balance due to the Bank of Bombay.	20 0 0		Government Agent's Commission and Fees.....	18 1 9
		1,020 0 0			1 0 10
	Total.....Rupees	15 6 7		Total.....Rupees	1,035 6 7

(Errors excepted)

(Signed) M. STOVELL, Secretary.

Bombay, 30th April 1854.

Dr.

Rajah of Dhar Prize Fund.

Cr.

1854.		Ra. a. p.	1854.		Ra. a. p.
Feb. 1st	Interest on Funded Capital.....	40 0 0	May 1st	Balance due to the Bank of Bombay	15 6 7
1855.			1855.		
Apr. 30th	Balance due to the Bank of Bombay.	15 8 3	Mar. 20th	A Prize awarded to Ganesh Bhondeo	40 0 0
				Government Agent's Commission.....	0 1 8
	Total.....Rupees	55 8 3		Total.....Rupees	55 8 3

(Errors excepted)

Bombay, 30th April 1855.(Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and find it correct.

(Signed) METCALPE LARKEN,
 " JUGONNATH SANKERSETT, } *Members.*
 " BOMANJEE HORMASJEE,

APPENDIX No. VIII.

Dr.

GANPATRAO VITHAL PRIZE FUND.

Cr.

1854.	Rs. a. p.	1854.	Rs. a. p.
Apr. 19th Received from Rajashree Ganpatrao Keebay of Indore, the following 4 per Cent. Government Promissory Notes, viz. —		The Notes mentioned on the other side were deposited with the Government Agents.....	
No. 8432 of 1854-55, for .. £.....	500 0 0		
No. 8537 of ditto, for .. £.....	1,000 0 0		
Total.....Rupees	1,500 0 0	Total.....Rupees	1,500 0 0

(Errors excepted)

(Signed) M. STOVELL, Secretary.

Bombay, 30th April 1854.

Dr. Ganpatrao Vitthal Prize Fund. Cr.

1855. Jan. 1st	<i>Rs. d. p.</i> Interest on two Government Promissory Notes, Nos. 8532 and 8537 of 1854-55, amounting together to Rupees 1,500, from the 1st of July 1854 to the 31st of December 1854, at 4 per cent per annum.....	<i>Rs. a. p.</i> 0 1 3 29 14 0
	<i>Rs. d. p.</i> Apr. 30th Government Agent's Commission..... Balance in the Bank of Bombay	
Total....Rupees		30 0 0

(Errors excepted)

Bombay, 30th April 1855.

(Signed) **M. STOVELL, Secretary.**

We the undersigned have examined this Account, and find it correct.

(Signed) **METCALFE LARKEN,**
 " **JUGONNATH SANKERSETT,**
 " **ROMANJEE HORMASJEE,** } *Members.*

APPENDIX No. IX:

SUNDARJI JIVAJI PRIZE FUND.

Dr. *The Sundarji Jivaji Prize in Account with the Elphinstone Institution.* Gr.

1853.	Rs. u. p.	1854.	Rs. a. p.
May 1st Balance of last year's Account	275 14 4	Apr. 30th A Prize awarded to Harishankar Balcrishna	40 0 0
1854.		Government Agent's Commission and Fees	0 1 8
Apr. 30th Interest on Funded Capital	40 0 0	Balance	275 12 8
Total.....Rupees	315 14 4	Total.....Rupees	315 14 4

(Errors excepted)

Bombay, 30th April 1854.

(Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favor of the Sundarji Jivaji Prize Fund, amounting to Rupees two hundred and seventy-five, annas twelve, and pies eight,

(Signed) JOHN MCLENNAN,
 " METCALFE LARKEN,
 " JUGONNATH SANKERSETT, *Members.*
 " BOMANJEE HOERMAJEE,
 " BHAWOO DAJEE,

Dr. *Sundarji Jivaji Prize in Account with the Elphinstone Institution.* Cr.

1854.		Ra. a. p.	1855.		Ra. a. p.
May 1st	Balance of last year's Account.....	275 12 8	Mar. 2nd	A Prize awarded to Parashram Vishnu	40 0 0
1855.				Government Agent's Commission.....	0 1 8
Apr. 30th	Interest on Funded Capital	40 0 0		Balance due by the Institution.....	40 1 8
	Total.....Rupees	315 12 8		Total.....Rupees	275 31 0
					315 12 8

(Errors excepted)

Bombay, 30th April 1855.

(Signed) M. STOVELL, *Secretary.*

We the undersigned have examined this Account, and do find a Balance in favor of the Sundarji Jivaji Prize Fund, amounting to Rupees two hundred and seventy-five, and *agnas eleven*.

(Signed) METCALFE LARKEN,
 " JUGONNATH SANKERSETT, } *Members.*
 " BOMANJEE HORMASJEE,

APPENDIX No. X.

BELL PRIZE FUND.

Bell Prize in Account with the Elphinstone Institution.

Dr.

CR.

	Rs. a. p.	1853.	Rs. a. p.
1853.			
May 1st Balance of last year's Account	247 6 0	Oct. 31st A Prize awarded to Hormasji Edalji	50 0 0
1854.		1854.	
Apr. 30th Interest on Funded Capital	50 0 0	Apr. 30th A Prize awarded to Ardassir Framji ... Government Agent's Commission and Fees	50 0 0 0 2 0
		Balance	197 4 0
Total... Rupees	297 6 0	Total... Rupees	297 6 0

(Errors excepted)

(Signed) M. STOVELL, Secretary.

Bombay, 30th April 1854.

We the undersigned have examined this Account, and do find a Balance in favor of the Bell Prize Fund, amounting to Rupees one hundred and ninety-seven, and annas four.

(Signed) JOHN McLENNAN,
METCALFE LARKEN,
JUGONNATH SANKERSETTI,
BOMANJEE HORMASJEE,
BHAWOO DAJEE, } *Members.*

DR. *Bell Prize in Account with the Elphinstone Institution.* CR.

1854.	Balance of last year's Account.....	1855.		Mar. 20th A Prize awarded to Nashirvanji Naoroji (Government Agent's Commission.....)	Rs. a. p.
		Rs.	a. p.		
1855.		197	4 0		40 0 0
Apr. 30th	Interest on the Funded Capital.....	40	0 0	Balance due by the Institution.....	0 1 8
	Total.....Rupees	237	4 0	Total.....Rupees	40 1 8
					197 2 4
					237 4 0

(Errors excepted)

(Signed) M. STOVELL, *Secretary.*

Bombay, 30th April 1855.

We the undersigned have examined this Account, and do find a Balance in favor of the Bell Prize Fund, amounting to Rupees one hundred and ninety-seven, annas two, and pias four.

(Signed) METCALPE LARKEN, }
" JUGONNATH SANKERSETT, } *Members.*
" ROMANJEE HORMASJEE, }

APPENDIX No. XI.

STATEMENT OF FEES.

Tabular Statement showing the Amount of Fees received from the 1st of April 1854 to the 31st of March 1855, from the Elphinstone Institution and Government Vernacular Schools at the Presidency, and from the English and Vernacular Schools in the Districts.

PRESIDENCY.		Rs.	a.	p.	Rs.	a.	p.
Elphinstone Institution		13,241	0	0			
Government Vernacular Schools		620	4	0	13,861	4	0
ENGLISH SCHOOLS.							
Surat.		1,838	0	0			
Rutnagiri		225	0	0			
Ahmedabad		844	0	0			
Ahmednuggur		351	0	0			
Dharwar		207	8	0			
Broach		323	8	0			
Tanna		782	12	0			
Sattara		335	12	0			
Dhoolia		459	8	0			
Sholapoor		217	0	0	5,584	0	0
VERNACULAR SCHOOLS.							
1st Division.							
In the Collectorate of Poona		662	2	0			
Ditto of Ahmednuggur		626	4	0			
Ditto of Sholapoor		313	7	0			
Ditto of Khardesh		398	6	0			
In the Districts of Sattara		611	6	2	2,611	9	2
2nd Division.							
In the Collectorate of Surat		659	15	0			
Ditto of Broach		275	2	0			
Ditto of Kaira		569	8	0			
Ditto of Ahmedabad		625	15	0	2,130	8	0
3rd Division.							
In the Collectorate of Tanna		473	15	0			
Ditto of Rutnagiri		1,214	3	0			
Ditto of Belgaum		769	9	0			
Ditto of Dharwar		815	5	0	3,273	0	0
Total....Rupees					27,460	5	2

The fees from the institution, from the vernacular schools at the Presidency, and from all the English schools, excepting those at Dharwar, Tanna, Dhoolia, and Sholapoor, which are mainly supported by the inhabitants themselves, are carried to the General Fund, on account of education.

The fees from the vernacular schools in the districts are disposed of differently. One-half is given to the masters of the different schools, provided the annual examination is satisfactory; the remainder is disposed of in repairing school-houses, in providing books for the scholars, in gratuities to masters and monitors, or in any other way which the School Committee and Superintendent may consider more desirable.

APPENDIX No. XII.

STATEMENT OF BOOK DEPOSITORY.

DR. *Receipts and Disbursements of the Book Depository of the Elphinstone Institution for 1853-54.* CR.

1853. May 1st 1854. Apr. 30th	Rs. a. p.	Rs. a. p.	1854. Apr. 30th	Rs. a. p.	Rs. a. p.	Rs. a. p.
Balance of last year's Account.....	....	2,196 4 9	Books purchased in England	3,427 8 8		
Books sold at the Presidency	8,046 10 6		Ditto do. in Bombay	2,558 9 10		
Ditto do. in the Branch Depositories	1,569 14 11		Ditto do. from Poona College	5,753 1 6		
Ditto do. to Poona College	1,441 6 0		<i>New Editions of Works Printed.</i>			
Ditto supplied to Government English Schools in the Mofussil	3,815 14 6		500 copies of Natural Philosophy for Be-	649 10 0		
Ditto do. Vernacular Schools in the Mo-			gunners, in Marathi	2,750 0 0		
fussil	7,447 15 2		2,000 " of Esop's Fables, in Marathi ..	630 0 0		
Ditto do. to the Schools in the Satara			3,000 " of Spelling Books, ditto ..	649 10 0		
Territory	1,745 15 0		500 " of Natural Philosophy for Be-			
Ditto do. to Regimental Schools	5,042 11 4		gunners, in Gujarati			
Ditto presented to Native Libraries	1,685 2 0		Charges for Translation	459 0 0		
Ditto do. to Female Schools	213 9 0		Binding Books for Sale	292 10 0		
Advance recoverable on account of Books.	31,119 2 7		Depository's Commission	2,079 12 3		
	4,119 7 1		Advance on account of Books and School			
			Materials	1,510 5 11		
			Stock of Books in hand on 1st May 1853	08,099 11 0		
			Ditto do. on 30th April 1854 ..	55,109 1 0		
			Balance			
Total.....Rupees 37,454 14 5						
			Total.....Rupees 37,434 14 5			

(Errors excepted)
(Signed) M. STOVELL, Secretary.

Bombay, 30th April 1854.

APPENDIX No. XIII.

LIST OF SUBSCRIPTIONS TO THE ELPHINSTONE
INSTITUTION, RECEIVED FOR 1854.

	Amount of Subscription.		
	Rs.	a.	p.
Adam Alee Sultan, Esq.....	15	0	0
Akbar Alee Khan, Esq.	10	0	0
Ardaseer Eduljee Chinai, Esq.	15	0	0
Aroon Samuel, Esq.	15	0	0
Atmaram Madhowjee, Esq.	25	0	0
Bappoo Jagannath Josey, Esq.	30	0	0
Bocarro, J. J., Esq.	15	0	0
Bomanjee Hormusjee, Esq.	60	0	0
Bomanjee Framjee Cama, Esq.	150	0	0
Bhaskar Soonderjee, Esq.	15	0	0
Burjorjee Viccajee, Esq.	60	0	0
Bhawoo Dajee, Esq.	30	0	0
Beiranjee Erajee Cola, Esq.	50	0	0
Cowasjee Shapoorjee, Esq.	15	0	0
Cowasjee Jahangir, Esq.	25	0	0
Cursetjee Nusserwanjee Cama, Esq.	125	0	0
Dadabhoy Dorabjee, Esq.	15	0	0
Dawood Sassoon, Esq.	60	0	0
Dorabjee Nusserwanjee, Esq.	30	0	0
Dhunjeebhoy Nusserwanjee Cama, Esq.	105	0	0
Dhunjeebhoy Framjee, Esq.	15	0	0
Dhunjeebhoy Cursetjee Shroff, Esq.	25	0	0
Dinshaw Manockjee, Esq.	15	0	0
Dossabhoy Hormusjee Cama, Esq.	25	0	0
Framjee Nusserwanjee, Esq.	30	0	0
Gá, A. G. de, Esq.	30	0	0
Govind Balerishna, Esq.	15	0	0

	<i>Rs.</i>	<i>a.</i>	<i>p.</i>
Ibrahim Samuel, Esq.	15	0	0
Hannah, J. T., Esq.	15	0	0
Hurba Raghoonath, Esq.	15	0	0
Normusjee Manockjee, Esq.	30	0	0
Howard, W., Esq.	50	0	0
Jugonnath Sankersett, Esq.	105	0	0
Jiwanjee Bomanjee Mehta, Esq.	45	0	0
Limjee Manockjee, Esq.	15	0	0
Manockjee Nusserwanjee Pitty, Esq.	30	0	0
Meerza Alee Jahn, Esq.	15	0	0
Muncherjee Framjee Cama, Esq.	25	0	0
Mungesh Pandoorung, Esq.	25	0	0
Munguldass Nathubhai, Esq.	30	0	0
Narayen Dajee, Esq.	15	0	0
Narayen Dinanathjee, Esq.	25	0	0
Nusserwanjee Cursetjee Dady, Esq.	50	0	0
Nusserwanjee Manockjee, Esq.	15	0	0
Nowrojee Cursetjee, Esq.	25	0	0
Nowrojee Furdoonjee, Esq.	15	0	0
Pestonjee Nowrojee Pochajee, Esq.	80	0	0
Purshotum Heerachand, Esq.	15	0	0
Rodrigues, F. X., Esq.	15	0	0
Rozario, C. B. de, Esq.	15	0	0
Ragoonath Narayen, Esq.	15	0	0
Sorabjee Framjee, Esq.	15	0	0
Sorabjee Pestonjee Framjee, Esq.	15	0	0
Silva, Antonio de, Esq.	15	0	0
Vinayek Wasoodewjee, Esq.	15	0	0
Vinayekrao Jugonnathjee, Esq.	45	0	0
Varjeevandass Madowdass, Esq.	30	0	0
Wasoodew Narayen, Esq.	25	0	0
Wasoodew Pandoorung, Esq.	15	0	0
Wishwanath Atmaram, Esq.	15	0	0
Wullubjee Mooljee, Esq.	15	0	0

Total.... 1,925 0 0

APPENDIX No. XIV.

*ANNUAL MEETING FOR THE PRESENTATION OF
SCHOLARSHIPS AND PRIZES.

The Annual Distribution of Prizes and Scholarships to the successful competitors of this Institution took place on Tuesday, the 20th instant, at 4 p. m., in the large room of the Town Hall, the Right Honorable the Governor presiding. His Lordship was seated immediately in front of the statue of the Honorable Mountstuart Elphinstone, founder of the Institution. Beside him were Rear Admiral Sir Henry Leeke, K.H., Commander in Chief of the Indian Navy; W. H. Harrison, Esq., Judge of the Sudder Adawlut; Jugomnath Sankersett, Esq., Bomanjee Hormasjee, and Bhawoo Dajee, *Members of the Board of Education*; and Dr. Stovell, *Secretary*.

There were also present John Harkness, Esq., A.M., *Principal of the Institution*; Professors Sinclair, Dadabhai Naorojji, H. Giraud, R. T. Reid, Esq., Barrister-at-law, and Professor Fraser; and a large number of visitors, amongst whom we observed the following ladies and gentlemen:—

Mrs. Fraser, Mrs. Parsons, Mrs. Shepherd, Mrs. Jenkins, Mrs. Haines, Miss Robinson; Drs. Don, Campbell, Peet, Haines, Carter, Impey, Arbuckle; Colonels Swanson, Bates, Lyon, Maughan; Majors Cruickshank, Birdwood, Estridge; Captains Wemyss, and Elliott; Lieutenant Elphinstone; Rev. Messrs. Fletcher, Anderson, Wilson, Cook, Colvin, Wallace, Bowen, Spring; T. L. Jenkins, H. L. Anderson, A. K. Corfield, Cursetjee Jamsetjee, Cowasjee Jehangir, Framjee Nusserwanjee, H. Young, J. J. Berkley, Rustomjee Jamsetjee, Sorabjee Jamsetjee, Cursetjee Nusserwanjee, Manockjee Nusserwanjee, C. J. Erskine, J. M. Erskine, C. M. Harrison, H. Conybeare, J. Graham, R. Rylie, H. E. Leeke, Dosabhoy Sorabjee, J. Firth, J. T. Cuivillier, Manockjee Cursetjee, E. Pratt, Venayek Wasoodeo, Ramchunder Balkrushna, J. Parsons, W. H. Scott, W. Peyton, Ardascer

Jamsetjee, Narayen Daji, Wishwanath Atmaram, Dhunjeebhoy Cursetjee Rutnager, Cursetjee Rustomjee, Bomanjee* Pestonjee, Ramchunder Dinanathjee, Venayek Hurichunder, Venayekrow Juggonnath, Nowrojee Furdoonjee, Narayen Dinanathjee, Dhunjeebhoy Framjee, M. A. Jehan, M. A. Shoostrin, Vurjeebundass Mahadeodass, Hormusjee Pestonjee, Homjee Cursetjee, Pestonjee Pochajee, Nowrojee Nanabhoy, Balajee Pandurang, Nanabhoy Haridass, Dosabhoy Framjee, Bhasker Soonderjee, Sorabjee Pestonjee, Framjee Manockjee, Esqs.; besides a large number of spectators.

The pupils of all the Government schools in Bombay were collected, those of the Vernacular and Branch English schools being seated on benches along the east side of the Hall, those of the Central English school along the west side, and the students of the College division and prize-boys of the different schools on cross benches in the centre.

Mr. Principal HARKNESS opened the proceedings of the evening by reading the following Summary of the Annual Report:—

MY LORD, LADIES, AND GENTLEMEN,—These pupils are brought together from the different Government institutions on this island, established for the purpose of general education. These institutions consist of a College and Schools. The latter are divided into English and Vernacular. The English schools are composed of a Central and two Branch schools, and there are six Vernacular schools,—four Maráthi, one Gujeráti, and one Hindustáni.

The number and description of pupils attending these institutions respectively are as follows, viz :—

	Hindoos.	Parsees.	Musal-mans.	Jews.	Christians.	Total.
I. Vernacular schools.	423	80	51	2	..	556
II. Branch schools ..	84	196	4	0	..	284
III. Central school ..	220	310	13	8	15	566
IV. College	56	43	..	..	1	100
	783	629	68	10	16	1,506

VERNACULAR SCHOOLS.

In the Vernacular schools, reading, writing, arithmetic, and the common branches of education are taught. Each pupil pays a monthly fee of two annas, and provides his own books, slates, and writing paper. Dictionaries, maps, &c. are supplied at the expense of Government.

Taking the average of the last three years, it appears that about three-fourths of the boys entered at these schools get no other education than what is there afforded. The remainder are subsequently admitted into the English schools.

ENGLISH SCHOOLS.

The time of a boy's continuing at the English school is exceedingly variable. Most of them carry away only a very superficial knowledge of the language; and it unfortunately happens, that the most promising boys not unfrequently leave earliest.

A fee of Rs. 2 a month is charged; but a boy who is unable to pay this sum may be entered as a free pupil, if his average place be above the middle of his class. This may be done easily by any boy of good abilities, or of ordinary abilities, provided he be diligent. It can only be felt as a hardship, therefore, by the poor boy, who is either idle or dull. Still there are many who, if not unable, are certainly unwilling to pay this amount, and who, consequently, prefer sending their sons to other schools, where they are taught gratuitously. This is believed to be the chief reason why the number of Hindoo pupils is diminishing.

In the Upper School, mathematics and history are taught through the medium of English. Written translations and exercises are introduced, and the study of Sanskrit and Persian is commenced. Only 25 per cent. of the pupils, it appears, reach this stage of progress, and of these less than a half, or about 10 per cent. of the whole, enter the College.

COLLEGE.

Description of Students.

The Students of the College are distinguished into four orders, viz. Stipendiary Scholars, Free Scholars, Free Students, and

Paying Students. The order to which a student belongs is determined in the following manner. To entitle him to hold any stipendiary scholarship, a candidate must have obtained not less than 60 per cent. of the aggregate value of the marks assigned to such scholarship examination. If he obtain 50, and under 60 per cent. marks, he gets a *Pass Certificate*, and is styled a Free Scholar. And if he gets 40, but under 50 per cent. marks, he is allowed to attend the proper class as a Free Student. A Paying Student is admitted to the lectures of all the Professors, by paying in advance the sum of Rs. 60 a year; or to the lectures of one Professor, on payment of Rs. 30. The first three orders thus indicate merit, but the absence of merit cannot be inferred from a student's belonging to the fourth, students of that order not being necessarily subjected to examination.

" According to this division, the students now attending the College are as follows, viz :—

	Stipendiary Scholars.	Free Scholars.	Free Students.	Paying Students.	Total.
First year students ..	7	12	13	5	37
Second year students. .	10	6	10	3	29
Third year students. .	6	8	7	3	24
Fourth year students. .	3	4	3	..	10
	26	30	33	11	100

Number of Students.

The number of students in the College at the end of the year was 77, that of the preceding year having been 76; and the present number, 100, is an increase of 9 above that at last Annual Meeting. Unless the accommodation and means of instruction be increased, it is not desirable that this number should be further augmented.

Scholarships.

When the scholarships were originally instituted, they were tenable for three years, and candidates found qualified by examination agreed, previous to their appointment, to attend the pre-

scribed course of instruction during the scholarship term, or to refund the amount they might have received. The stipends, at the same time, were liable to forfeiture from misconduct, or if the progress exhibited at the half-yearly examinations was deemed insufficient.

Of late, however, the scholarships have been held for one year only, and a scholar is permitted to resign when he thinks fit. The consequence is, that little more than 10 per cent. of them reach the fourth year class. This subject, however, is shortly to be reconsidered. The reason for noticing it now, is merely to show the internal working and present condition of the institution.

Studies.

In the College there are, at present, four Professors, by whom the following subjects are taught, viz :—

- I. English Literature, Logic, Mental and Moral Philosophy, by the Principal.
- II. History, Geography, Political Economy, and the Philosophy of Induction, by Professor Sinclair, LL.D.
- III. Mathematics and Natural Philosophy, by Professor Dadabhai Naorozi.
- IV. Chemistry, Geology, and Botany, by Professor Giraud.

Examination.

A very strict examination has been held, and detailed reports, showing what progress has been made in each of these branches, have been submitted by the respective Professors. As these reports will shortly be printed, it is unnecessary to occupy your time by reading them now. The result is deemed satisfactory. A greater number of candidates have passed for the higher scholarships than on any previous occasion.

GENERAL REMARKS.

The Masters and Assistant Masters, both of the Central and Branch schools, are now, for the first time since the foundation of the institution, all Natives. The result of the examination shows that they have discharged the duties entrusted to them with zeal and ability. They are all deserving of commendation ; but I would particularly mention Bomanji Pestanji, the Master of the Central

school, and Kavasji Nasservanji and Gungadas Keshodas, Masters of the two Branch schools.

To Professors Sinclair, Giraud, and Dadabhai Naorojji, I take this opportunity of returning thanks for their co-operation and assistance throughout the year, but more especially in conducting the laborious examination at its close.

The Right Honorable the CHAIRMAN then rose, and spoke somewhat to the following effect :—He was happy to say that Education was progressing with rapid strides in India. Last year the Court of Directors sent out a Despatch on Education, reorganizing the department, and directing the establishment of Universities in India, in the different Presidency towns, to encourage a regular and liberal course of education, by conferring academical honors and degrees. His Lordship considered that state paper a most important one, as conveying general directions for the greater diffusion of the knowledge of the arts and sciences of Europe among the Natives of this country, on a grand and liberal scale. The Court had expressed their sincere thanks to the present Boards and Councils of Education for the manner in which they had performed their duty. His Lordship here read an extract from the Court's Despatch ; and added that the results of the labors of the several Boards and Councils had been most gratifying. The establishment of Medical Colleges in India had also been very successful. The case of Dr. Chuckerbutty, who recently passed a very creditable examination in England, and who was second in rank among the whole number of competitors, was prominently brought to the notice of the visitors as a strong incentive to close application and study among Native students. The Right Honorable Chairman especially spoke of the Grant Medical College in highly eulogistic terms. It was an institution recognised by the highest medical associations in Europe, as it had been invested with powers of granting diplomas on the same footing as a first-rate College in Europe. His Lordship regretted the departure of Dr. McLennan, who was the first to give a stimulus to the study of medicine in the Bombay Presidency, and to whose superintendence the present flourishing state of the Grant College might be attributed. The Professorship of Jurisprudence—the idea of which first originated with

his Lordship's excellent friend Sir Erskine Perry—would also be immediately established. The Report just read by Mr. Harkness gave his Lordship great satisfaction, as the result of the labors of the past year, especially in the higher branches of science, had been most successful. One thing, the noble Chairman said, still remained to be mentioned, viz. that in announcing that the Department of Education was to be placed in the hands of a Director of Public Instruction, he gladly availed himself of the opportunity of returning the thanks of Government to the Board of Education, and especially thanks to Dr. McLennan (a late Member of the Board), who had done so much for the advancement of medical education in Bombay. He also thanked Mr. Jugonnath Sankersett, who had been a Member of the Board for the last five-and-twenty years. He could not but tender his thanks also to Dr. Stovell, who had so laboriously co-operated as Secretary to the Board for the cause of Education. His Lordship trusted that the services of these several gentlemen would be made available in the Senate of the new University. Having returned his individual thanks to the Members of the Board and the Principal and Professors of the College, His Lordship resumed his seat amidst the applause of the assembled multitude.

MR. JAGONNATH SANKERSETT then briefly addressed himself to the Chairman as follows:—

MY LORD,—I cannot let this opportunity pass, especially as the Board of Education is shortly to be dissolved, of expressing our best thanks for the flattering manner in which the services of the Board of Education, and particularly of the Native Members, have been spoken of by your Lordship. In performing those duties, we have only done our duty to our countrymen.

Prizes and scholarship diplomas were then distributed to the successful students of the several departments of the institution; and vernacular schools at the Presidency.

SCHOLARSHIPS AND PRIZES AWARDED.

1. Five First Class Normal Scholarships, 30 rupees a month each, 3 stipendiary, and 2 honorary.
2. Six Second Class Normal Scholarships, 20 rupees a month each.

3. Ten West Scholarships, 15 rupees a month each.
4. Seven Clare Scholarships, 10 rupees a month each.
5. Two Gaekwar Scholarships, 10 rupees a month each.
6. The Bell Prize, value Rupees 40, to Nusserwanji Naorozji, for the best essay on "The Cultivation of Natural Science necessary to the Development of the Resources of India."
7. The Raja of Dhar Prize, value Rs. 40, to Gancsh Dhondeo, who obtained the greatest number of marks in the different subjects of examination for the 1st Class Normal Scholarship.
8. The Sundarji Jivaji Prize, value Rs. 40, to Parashram Vishnoo, for the best essay on "The Constitution of the Universe, and the General Laws which regulate the Course of Human Affairs, are wisely and beneficially contrived for the Happiness of Man."
9. Prizes to the English School Department.
10. Prizes to Vernacular Schools.

The interesting proceedings of the evening terminated a little before six o'clock.—*Bombay Gazette, March 21st, 1855.*

APPENDIX No. XV

NOTIFICATION RELATIVE TO THE ESTABLISHMENT OF VERNACULAR SCHOOLS.

The Honorable the Court of Directors having been pleased to sanction an increase to the Annual Grant in behalf of Native Education, the Board of Education hereby give notice, that they are prepared to receive applications from the inhabitants of all towns and villages who are desirous of having a vernacular school established, and who at the same time are prepared to prove their anxiety for the establishment of such school, by agreeing to assist in supporting it to the following extent :—

1st.—To pay half the salary of the master.

2nd.—To provide and keep in repair a suitable school-house, and ordinary school furniture.

3rd.—To defray all contingent expenses.

4th.—Each boy to pay a monthly fee of one anna, to be expended on school purposes by the School Committee, in communication with the Superintendent of Schools.

5th.—Each boy to provide himself with the requisite class-books.

2. The salary of the master to be made dependent on the extent of the population of the village or town, as follows :—

Under	1,000 inhabitants	Rs. 10
Between	1,000 and 2,000 inhabitants	15
Ditto	2,000 and 4,000 ditto	20
Ditto	4,000 and 6,000 ditto	25*
Ditto	6,000 and 10,000 ditto	30*
Ditto	10,000 and 15,000 ditto	35*
Above	15,000 inhabitants	40*

* Provided there is only one Government school in the town.

Half the amount to be paid by the inhabitants, and half by Government. If, in consequence of the number of boys in any school, one or more assistant teachers should be required, the pay of such teachers, as of the master, to be equally divided between the town or village and Government.

3. Applications from the collectorates of Khandesh, Poona, Ahmednuggur, and Sholapoor, to be addressed to the Superintendent of Schools in 1st Division, at Poona; from the collectorates of Ahmedabad, Kaira, Broach, and Surat, to the Superintendent of Schools in 2nd Division, at Surat; and from the collectorates of Tanna, Rutnagiri, Belgaum, and Dharwar, to the Superintendent of Schools in 3rd Division, at Belgaum.

By order of the Board of Education.

M. STOVELL,
Secretary.

Bombay, 16th May 1854.

APPENDIX No. XVI.

SCHOLARSHIP REGULATIONS FOR THE ELPHINSTONE INSTITUTION.

The Annual Scholarship Examination will commence at the Institution on Monday, the 4th December, at 11 A. M.

2. There are forty-five (45) stipendiary scholarships, open to all Natives of India who shall produce satisfactory certificates of conduct from the head masters or principals of the schools or colleges in which they have been taught, subject to the conditions mentioned below.

3. These scholarships are as follows, viz :—

No.	Designation.	Monthly Value.	Term.
		<i>Rs.</i>	
24	Clare	10	} From 1st January to 31st December 1855.
12	West	15	
6	2nd normal...	20	
3	1st normal ...	30	

4. The age of candidates for Clare scholarships must not exceed twenty-one years.

5. No candidate shall compete more than twice for a scholarship of the same grade.

6. The subjects and books on which candidates will be examined are as specified in the scheme of study in the Elphinstone Institution for 1854, printed in the Report of the Board of Education for 1853-54, Appendix VI. pp. 110—112.

7. In every subject, the full answer to each question is represented by a number, and the estimated value of the answers returned by the different candidates is denoted by marks having

the same ratio to that number as the answer received has to the complete answer. Candidates obtaining 60 per cent. of the aggregate value of full answers to the questions, both paper and *vivâ voce*, are eligible to stipendiary scholarships of the grade for which such questions were proposed. To these candidates, or as many of them as there are available scholarships of the several grades for which they are respectively qualified, diplomas, authorising them to receive the appropriate stipends, are awarded, in the order of their marks.

8. A candidate for a scholarship of any grade obtaining 50 and under 60 per cent. marks is presented with a certificate of qualification for that grade, and has the privilege of attending the corresponding classes as a "free scholar."

9. A candidate who fails to obtain 50 per cent. marks, but whose aggregate answers amount to 40 per cent. of the estimated full value, is allowed to attend the classes gratuitously as a "free student." The number of "free scholars" and "free students" attached to each class is, for the present, unlimited.

10. In examining students at the close of their fourth year, the examiners may, at their discretion, question upon any of the subjects taught during the previous years of their college course, in addition to the proper studies of the year. At this examination, students obtaining 60 per cent. marks are presented with a certificate of having completed the four years' course *with credit*; obtaining 70 per cent., of having passed *with distinction*; and 80 per cent., to a certificate of *high proficiency*.

11. There are also two (2) stipendiary scholarships to be competed for, on the 20th and 21st December; by those students who, on the 1st January next, shall have completed two (2) years of their college course in the institution. These are as follows, viz:—

No.	Designation.	Monthly Value.	Term.
		<i>Rs.</i>	
2	Gaikwar	10	{ From 1st January to 31st December 1855.

These scholarships, which are awarded, one for proficiency in Maráthi and English, and the other for proficiency in Gujaráti and English, may be held in addition to a second normal scholarship.

(Signed) **JOHN HARKNESS,**
Principal, Elphinstone Institution.

By order of the Board of Education.

M. STOVELL,
Secretary.

Bombay, 10th October 1851.

APPENDIX No. XVII.

REVISED RULE VIII. OF THE NOTIFICATION RELATIVE TO ADMISSION INTO THE LOWER GRADES OF THE PUBLIC SERVICE.

GENERAL DEPARTMENT.

The Right Honorable the Governor in Council is pleased to publish, for general information, the following Modification of Clause 8 of the Rules for admitting Candidates into the lower grades of the Public Service, published in the Government Gazette of the 20th May 1852 :—

8. When, for the first time in any year, a vacancy, capable of being filled, without serious inconvenience to the public service, by a candidate not previously belonging to that service, shall occur in the Adawlut or principal Cutcherry establishment of any district, the officer in whom is vested the authority of supplying such vacancy shall notify the nature and salary of the vacant office to the Board of Education, who will furnish a list of such pupils as shall be desirous of filling the vacancy, and shall appear to the Board capable of performing the required duties; the names entered in such list being those of pupils who shall have attained one of the two standards of qualification prescribed in the appendix to this Rule; and such vacancy shall be filled up from among the persons named in the Board's list, unless the officer with whom the appointment rests shall see some especial reason for refusing to select from the list submitted to him: and in every such case he shall report the nature of his objection to the Board of Education, who shall submit his report to Government, with their opinion.

APPENDIX TO RULE 8,

Showing the Standards of General Qualification requisite under the said Rule.

I.—For pupils from vernacular schools :—

1. Good, correct, ^{*}fluent, intelligent reading.
2. Ability to give an account of what has been read.
3. A good hand, both in Balbodh and Modi.
4. Correct writing from dictation.
5. Ability to write out an order or letter according to directions.
6. Correct composition, to be shown by an essay.
7. A good knowledge of grammar, with ability to parse correctly.
8. A good knowledge of general geography, with a particular acquaintance with that of India.
9. A fair knowledge of the History of India.
10. A good knowledge of the History of the Maráthas.
11. A familiar knowledge of arithmetic.
12. A good knowledge of algebra, as far as quadratic equations.
13. Sixty propositions of Hutton.
14. A knowledge of Native mercantile accounts.
15. Of whatever number of marks may be given for the above, 75 per cent. should be required to qualify a pupil for selection.

II.—For pupils from English schools :—

1. Correct reading, writing, and spelling.
2. A thorough knowledge of McCulloch's series of school books.
3. Two school geographies.
4. Grammar, parsing, and a knowledge of affixes and prefixes.
5. Eisdale's Catechism of Marátha History.
6. Marshman's History of India, Murray's History of British India, and Taylor's Manual of Ancient History.
7. Arithmetic.
8. Algebra, to quadratic equations.
9. Three books of Euclid.

10. The same per-centage of marks as for the vernacular schools.
11. Pupils from the English schools must have a competent knowledge of the language of the province in which they are to be employed.

By order of the Right Honorable the ^{*}Governor in Council,

W. HART,

Secretary to Government.

Bombay Castle, 21st February 1855.

APPENDIX No. XVIII.

Return of Government Vernacular Schools in the 1st Division, comprising the Collectorates of Poona, Ahmednuggur, Sholapur, and Khandesh, and the Districts of Sattara, under the Superintendence of Mahádeo Govind Shástrí, Esq.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils	No. of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.	
				On Register.	Examination.		Rs. a. Y. m.				
1	1826	Poona, No. I.	80,000	180	169	Keshava Shivarám	Brahmin ..	30 0 6	6 Sept 1854	An excellent S. & M.	
						Bálaji Rámchandra	Ditto ..	12 0 2	4	....	A good teacher.
						Rámchandra Balal	Ditto ..	5 0 0	10	....	Do. do.
2	1830	Ditto, No. II.	80,000	97	84	Náro Vitthal Phatlke	Ditto ..	5 0 0	2 1	....	Do. do.
						Hari Rámchandra	Ditto ..	15 0 7	0	Do. do.	S. & M. both good.
						Ragho Nigday	Kunbi	2 8 ..	..	....	Recently appointed.
3	1830	Ditto, No. III.	4,500	124	120	Venúvek Sakharám	Brahmin..	20 0 13	11 Aug 1854	S. in an improving state.	
4	1830	Talegaum		67	50	Hari Vitthal	Ditto ..	5 0 0	2 1	....	An intelligent teacher.
5	1844	Chinchúr		2,881	67	55	Mahádaji Govind	Ditto ..	12 0 15	11 Nov 1854	S. in bad order.
6	1842	Shivapur	2,000	61	49	Moro Bábirao Apte	Ditto ..	10 0 10	3 Oct 1854	An industrious M.	
7	1826	Sassur	6,400	96	86	Govind Mahádeo	Ditto ..	10 0 15	0 Mar 1855	Do. do.	
						Vitthal Rámchandra	Ditto ..	15 0 15	11 Sept 1854	M. intelligent, but not steady.	

NOTE.—S. denotes School,
M. Master.

No. of Schools.	Name of Town or Village.	Estimated Population.	No. of Pupils.	Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
			On Register.	Present at Examination.		Rs. a. Y. m.			
81836	Súpe	3,000	58	51 Ganes Káshináth.	Brahmin ..	10 0 18	5	June 1854	S. in a satisfactory state.
91847	Baramati	4,000	130	118 Ganes Hari	Ditto ..	10 0 7	10	May 1854	Do. do.
101836	Indapúr	3,311	75	66 Ganes Wasudeva	Ditto ..	10 0 3	..	....	A tolerable teacher.
111845	Pimpalvandi	2,900	45	38 Laxumon Atmaram	Ditto ..	10 0 4	11	Do. do.	S. not in satisfactory state.
121845	Hivari	1,112	35	38 Makúnd Trimbak	Ditto ..	12 8 15	11	Oct 1854	S. in tolerable order.
131839	Junir	13,238	98	28 Govind Náráyan	Ditto ..	10 0 12	5	Do. do.	S. not in good condition.
141839	Ghore	4,555	54	93 Náo Bálerishná	Ditto ..	20 0 6	7	Do. do.	An excellent S. and M.
151847	Avasari	2,425	46	51 Rámchandra Náráyan	Ditto ..	12 0 14	4	Do. do.	S. in tolerable order.
161839	Kher	2,750	61	44 Damodhar Vishnu	Ditto ..	10 0 14	9	Do. do.	Do. do.
171842	Chás	1,127	37	57 Báláji Mahadeo	Ditto ..	12 8 6	6	Do. do.	M. recently appointed.
181845	Kadús	3,084	66	34 Bálerishná Govind	Ditto ..	10 0 12	7	Do. do.	S. and M. both good.
191848	Chákan	2,500	73	62 Rámchandra Náráyan	Ditto ..	12 0 13	2	Do. do.	S. improved.
201840	Paud	1,084	40	Venayek Báláji	Ditto ..	1 4 1	7	Do. do.	An industrious teacher.
211854	Bhoree .....	....	24	64 Shivram Sakharám	Ditto ..	12 0 0	6	Sept 1854	M. recently appointed.
221854	Indapúr	3,111	24	34 Kondu Chintámon	Ditto ..	10 0 4	0	Oct 1854	S. much improved.
231854	Kulus .....	....	20	.. Diakar Káshináth	Ditto ..	10 0 0	6	....	S. recently established.
241854	Baramaty	3,329	21	.. Wulud Syed Wulud	Musulman ..	10 0 0	6	....	Do. do.
251854	Kulch	500	30	.. Sakharám Krishna	Brahmin ..	10 0 0	4	....	Do. do.
				.. Syed Biri	Musulman ..	10 0 0	5	....	Do. do.
				.. Anant Bulwant	Brahmin ..	10 0 0	3	....	Do. do.

NOTE.—S. denotes School,
M. Master.

Ahmednuggur Collectorate.													
26	1826	Ahmednuggur, No. I.	155	140	Vásudeva Bhikáji	Brahmin ..	19	8	6	6	Mar 1855	An excellent S. and M. Recently appointed.	
27	1826	Ditto, No. II.	25,000	95	Rámchandra Bhaskar	Ditto ..	4	0	4	....	Do.	do.
28	1832	Ditto, No. III.		95	Gopal Bapuji	Ditto ..	19	8	0	7	Do. do.	do.	
29	1834	Ditto, No. IV.			Marthau Govind.	Ditto ..	4	0	5	....	Do.	do.
30	1845	Karjat			Bábaji Bhikájee.	Ditto ..	4	0	5	....	Do.	do.
31	1849	Kharde		139	Krishnáji Gaonáth.	Ditto ..	14	8	19	1	Apr 1855	S. improving.	
32	1841	Jamkhed		26	Rámchandra Tatváji	Maráthá ..	10	0	0	6	Mar 1855	S. recently established.	
33	1842	Parnair		79	Chintámon Vithal	Brahmin ..	10	0	2	10	Nov 1854	Do. do.	
34	1841	Rahuri		48	Rámchandra Balvant	Ditto ..	10	0	5	10	Do. do.	S. much improved.	
35	1848	Korhale		50	Pándurang Sakharám.	Ditto ..	10	0	14	3	Do. do.	S. in a satisfactory state.	
36	1844	Rahato		45	Bálerishná Govind.	Ditto ..	10	0	2	10	Do. do.	S. not in a satisfactory state.	
37	1846	Puntambe		75	Keshava Krishná	Ditto ..	10	0	10	9	Apr 1855	S. well managed.	
38	1846	Kopergaum		46	Náro Mallár	Ditto ..	10	0	15	1	Do. do.	S. in a satisfactory state.	
39	1837	Yoleh		43	Raghnáth Rámchandra	Ditto ..	10	0	18	6	Do. do.	Do.	
40	1844	Chandrad		70	Laxumon Janárdhan	Ditto ..	15	0	13	5	Mar 1854	S. not examined during the year.	
41	1845	Sukene		62	Vithal Atmáram	Ditto ..	10	0	9	0	Apr 1855	S. in a satisfactory state.	
42	1847	Dindori		102	Náro	Ditto ..	19	8	17	9	Feb 1854	S. not examined during the year.	
43	1826	Nasik, Maráthi.		92	Báláji Bápáji.	Ditto ..	12	8	15	10	Dec 1853	Do.	
44	1845	Nasik, Hindustáni.		40	Bháskar Máhadeo	Ditto ..	10	0	7	2	Do. do.	Do.	
45	1836	Trimbak		45	Máhadeo Jávardhan Nench ..	Ditto ..	10	0	7	5	Do. do.	Do.	
46	1826	Nasik, Maráthi.		257	Laxumon Naríng	Ditto ..	24	8	6	6	Do. do.	Do.	
47	1826	Nasik, Maráthi.			Ráoji Naráyan.	Ditto ..	15	0	1	8	Do. do.	Do.	
48	1826	Nasik, Maráthi.			Trimbak Purashráam	Ditto ..	6	0	7	7	Do. do.	Do.	
49	1826	Nasik, Maráthi.			Krishnáji Rámchandra	Ditto ..	5	0	1	8	Do. do.	Do.	
50	1826	Nasik, Maráthi.			Máhomed Hussen	Musalman.	20	0	12	0	Jan 1853	Do.	
51	1826	Nasik, Maráthi.			Vánuaji Trimbak	Brahmin ..	10	0	11	9	Dec 1853	Do.	

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils.	Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
				On Register.	Examination.					
							Rs. a. Y. m.			[year.
46	1844	Sinnar	7,000	46	Govind Balal	Brahmin ..	15 0 18	8 Dec 1853	S. not examined during the	
47	1847	Vavi	2,000	46	Rámchandra Trimbak	Laud.	10 0 5	6 Do. do.	Do. do.	
48	1834	Sanganer, Mar. ..	7,495	128	Rágho Máhádeo	Brahmin ..	20 0 15	2 Do. do.	Do. do.	
49	1845	Sanganer, Hin. ..	7,495	29	Shaik Máhomed	Musalman ..	10 0 8	10 Do. do.	Do. do.	
50	1845	Dandarpal	1,808	36	Pándurang Dinkar	Brahmin ..	10 0 9	8 Nov 1853	Do. do.	
51	1832	Akoleh	3,796	85	Rámchandra Trimbak Bowálkar ..	Ditto ..	30 0 24	9 Do. do.	Do. do.	
52	1838	Kotul	2,209	63	Vishnu Vithal	Ditto ..	10 0 5	9 Do. do.	Do. do.	
53	1854	Akolneer	1,941	45	Náro Govind	Ditto ..	15 0 9	8 Apr 1855	S. recently established.	
54	1854	Nimon	2,485	44	Mohony Trimbak	Laud.	10 0 0	5	Do. do.	
55	1854	Umbay	600	22	Govind Yadow	Brahmin ..	10 0 0	4	Do. do.	
56	1854	Vinchoor	3,000	115	Naráyan Balal	Ditto ..	20 0 0	3	Do. do.	
		<i>Sholapoor</i>								
		<i>Collectorate.</i>								
57	1827	Sholapoor	30,600	103	Janárdhan Rámchandra	Brahmin ..	20 0 17	3 Dec 1854	S. much improved.	
					Ganesh Govind	Ditto ..	10 0 1	6	A good teacher.	[this S.
58	1846	Charchan	3,065	26	Rámcrishna Ragunath	Ditto ..	12 0 18	6 Do. do.	M. rec ^d ly appointed to	
59	1840	Mangoli	6,000	41	38 Krishnáji Apáji	Ditto ..	10 0 14	4 Jan 1855	S. much improved.	
60	1848	Bhagevadi	5,000	28	28 Shaikh Nabu	Musalman ..	8 0 6	7 Do. do.	S. in tolerable order.	

No. of Schools.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
			On Register.	Present at Examination.						
							<i>Rs. a. p. m.</i>			
82/1853	Wai	10,980	101	93	Sakarām Govind	Brahmin ..	30 0 0	0	8 Mar 1855	S. in good order.
					Vasudeo Chinnuji	Ditto ..	12 0 1	7	.....	A skilful teacher.
83/1853	Pandarpur	13,767	84	81	Shitarām Balerishna	Marātha ..	30 0 1	1	6 Dec 1854	A very promising S.
84/1853	Bijapur	9,194	87	79	Kashināth Vishvanāth Shāstri.	Brahmin ..	30 0 1	1	5 Jan 1855	Do. do.
85/1854	Kurur	10,251	113	112	Ganesh Narāyan Parajpay ..	Marātha ..	30 0 1	2	2 Feb 1855	Do. do.
					Bhiccaji Anant	Brahmin ..	12 0 0	4	.....	A good teacher.
86/1854	Whagholee	1,800	40	34	Vamouji Govind	Ditto ..	8 0 0	2	5 Mar 1855	S. recently established.
87/1854	Menew-lee	660	36	31	Vishnu Bachaji	Ditto ..	8 0 0	2	1 Do. do.	S. tolerably well managed.
88/1854	Atpady	5,350	63	62	Vadov Trimbak	Ditto ..	8 0 1	1	6 Jan 1855	A promising S.
89/1854	Limb	2,200	63	40	Ganesh Hari	Ditto ..	12 0 0	0	8 Feb 1855	Do. do.
90/1854	Batishiraly	3,610	35	25	Venkatesh Babachoria	Ditto ..	18 0 0	0	8 Do. do.	Do. do.
91/1854	Maholee	2,006	36	22	Sudatesh Gopal	Ditto ..	8 0 0	13	7 Do. do.	S. recently established.
92/1854	Kudegaum	2,692	69	67	Naro Gopal	Ditto ..	8 0 0	0	7 Do. do.	Do. do.
93/1854	Viteh	4,200	21	21	Govind Krishna	Ditto ..	14 0 5	5	6 Jan 1855	Do. do.
94/1854	Wattar	1,500	36	..	Mahādaji Bhaskar	Ditto ..	8 0 0	0	7 Do. do.	Do. do.

NOTE.—In this division there are also 53 village schools in the Purandhar districts of the Poona collectorate, containing 1,656 boys.

APPENDIX No. XIX.

Return of Government Vernacular Schools in the 2nd Division, comprising the Collectorates of Surat, Brouch, Ahmedabad, and Kaira, under the Superintendence of James Graham, Esq.

No. of Schools.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
			On Register.	Present at Examination.						
1	1826 Surat, No. I.	90,000	201	177	Tripuráshankar Manishankar.	Brahmin ..	25 0	11 0	Dec 1854	One of the best S. and M.
2	1826 Ditto, No. II.		70	57	Nagindas Narbhairam	Vania	5 0	0 5	Do. do.	Newly appointed.
3	1843 Ditto, No. III. ..		70	51	Pranshankar Umáúth	Brahmin ..	19 0	28 0	Do. do.	One of our worst teachers.
4	1847 Ditto, No. IV.		95	85	Keshu Prám Amritram	Ditto ..	15 0	1 11	Do. do.	A tolerable S. and M.
5	1848 Ditto, No. V.		104	93	Ratanshankar Manishankar ..	Ditto ..	20 0	7 0	Do. do.	An excellent S. and M.
6	1849 Ditto, No. VI.	1,823	100	91	Fribhuvandás Mathurádas ..	Vania	19 0	6 0	Do. do.	Do. do.
7	1849 Ditto, No. VI.		60	47	Valabram Itchúrám	Brahmin ..	10 0	7 0	Do. do.	An improving S.
8	1841 Kaliavadi		51	39	Abdul Rauf	Musalman ..	20 0	6 0	Do. do.	Do. do.
9	1820 Balsad		68	64	Laxmirám Narotam	Brahmin ..	19 0	13 0	Do. do.	One of our worst teachers.
10	1850 Pardi		61	45	Shivaprasád Ruprám	Ditto ..	19 0	20 0	Do. do.	Do. do.
11	1848 Surbhon	2,035	36	29	Párvatishankar Durgáshankar	Vania	15 0	4 6	Do. do.	One of our best S. and M.
12	1847 Bardoli	3,300	53	45	Kirparám Adirám	Brahmin ..	10 0	6 0	Do. do.	A tolerable S. and M.
					Harnaráyan Náronrám	Ditto ..	15 0	7 6	Do. do.	Do. do.

NOTE.—S. denotes School,
M. Master.

No. of Schools.	Name of Town or Village.	Estimated Population	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
			On Register.	Present at Examination.			Rs. a. P. m.			
131851	<i>Surat</i> <i>Collectorate</i> (continued).	6,000	46	38	Rámnáth Jagonnáth.....	Brahmin ..	15 0 3	8 Dec 1854		A tolerable S. and M.
141830	Mandavi	2,800	45	44	Prággi Valahji	Ditto ..	15 0 1	11 Do. do.		S. in very good order.
151849	Mota	9,078	65	59	Shivachram Ratnam	Ditto ..	10 0 1	1 Apr 1855		S. in tolerable order.
161827	Rander	4,300	63	54	Itcharam Vishvanath	Ditto ..	19 0 24	0 Do. do.		An improving school.
	<i>Broach</i> <i>Collectorate.</i>									
171826	Broach	31,000	158	125	Makúndram Asharám	Brahmin ..	25 0 23	0 Mar 1855		S. in tolerable order.
181830	Anklesar	7,839	88	70	Luxumínárávân Nathurám ..	Ditto ..	10 0 9	0 Do. do.		Newly appointed.
191833	Ahmod	4,425	70	64	Keshavaram Vishvanath	Ditto ..	19 0 23	0 Do. do.		An improving S.
201830	Jambúsar	12,589	106	83	Bhovaninand Gaupatinand ..	Ditto ..	19 0 2	0 Do. do.		A good S. and M.
211853	Hansote	4,000	50	42	Vakatrám Ajarámár.....	Ditto ..	19 0 17	0 Do. do.		Less satisfactory than last year.
	<i>Ahmedabad</i> <i>Collectorate.</i>									
221826	Ahmedabad No. 1.		232	167	Umedráam Itchárám.....	Ditto ..	19 0 11	6 Apr 1855		A tolerable M.
221826	Ahmedabad No. 1.		232	167	Tuljárám Sukráam.....	Brahmin ..	30 0 28	0 Mar 1855		An excellent S. and M.
					Magaulal Govindráam.....	Ditto ..	5 0 6	0 Do. do.		An intelligent teacher.

NOTE.—S. denotes School,
M. Master.

APPENDIX No. XX.

Return of Government Vernacular Schools in the 3rd Division, comprising the Collectorate of Tanna, Rutuagiri, Belgaum, and Dharwar, under the Superintendence of F. P. Baker, Esq.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils.		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.		Length of Service.	When last examined.	Remarks.
				On Register.	Present at Examination.			Rs.	a.	Y.	m.	
11822	Tanna	.....	11,150	110	90	Narayan Babacharya	Brahmin ..	20	0	3	8 Feb. 1855	[tion. M. does not give satisfac- Best S. in the collectorate.
21830	Kalian	.....	7,000	233	176	Sakharam Shivarani	Ditto ..	19	8	11	Do. do.	
						Narayan Ganesh	Ditto ..	6	0	0	4	....
						Krishnaji Shivarani	Ditto ..	5	0	0	9	....
31833	Bassein	.....	6,615	103	90	Daji Moreswar	Ditto ..	15	0	21	11 Do. do.	S. in a satisfactory state.
						Purshutani Hari	Shenvi ..	5	0	0	7	....
41839	Mahad	.....	5,000	125	92	Kashinath Bapuji Ok	Brahmin ..	12	0	14	11 Mar 1855	S. in a tolerable state.
						Hari Narayan	Ditto ..	5	0	0	10	....
51831	Panvel, Mar.	.....	7,000	162	131	Kashinath Krishna	Ditto ..	19	8	15	11 Feb. 1855	S. in a tolerable state.
61840	Ditto, Hind	.....		36	18	Syud Mahomed	Musalman ..	20	0	1	3 Do. do.	S. and M. both bad.
71840	Mahim	.....	4,000	135	107	Govind Dinkar Chitle	Brahmin ..	15	0	14	10 Do. do.	S. in tolerable order.
						Gopal Bapuji	Ditto ..	5	0	0	7	....
81854	Ooran	.....	....	65	..	Gopal Sakharam	Ditto ..	10	0	0	3	....
91854	Puluspe	635	35	..	Krishnaji Shivarani Kelkur	10	0	0	1

NOTE.—S. denotes School,
M. Master.

do.

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No. of Schools.	Name of Town or Village.	Estimated Population.	No. of Pupils	Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
			On Register.	Present at Examination.		Rs. a. Y. m.			
28	1830 Belgaum, Mar....	16,150	296	258	Náro Rámchandra Jámbeher.	Brahmin ..	25 0 14 6	Nov 1854	Largest and best S. in the collectorate. [teacher.
29	1838 Ditto, Can.		138	118	Náro Rámchandra Dátár Káshínáth Keshava Gudre.. Janárdhan Krishná	Ditto .. Ditto .. Ditto ..	12 0 5 6 5 0 2 6 15 0 16 11	.... .... do. do.	Competent and industrious do. S. in good condition.
30	1838 Samgaum		63	48	Raojee Bálerishna	Ditto ..	5 0 3 3	....	An attentive teacher.
31	1838 Bailhongol	2,400	137	Laxumon Ránji	Marátha ..	12 8 6 11	Do. do.	Do. do.	S. in good order.
32	1840 Gokak	6,000	106	Parvayá bin Lingayá	Lingayat ..	12 8 14 8	Do. do.	Do. do.	S. in tolerable condition.
33	1841 Sadalga	19,000	94	Báláji Gopal	Brahmin ..	12 8 7 1	Sept 1854	Do. do.	Do. do.
34	1849 Jambuti	5,190	47	Káshínáth Yedneshwar	Ditto ..	12 8 10 4	Do. do.	Do. do.	S. in good order. [state.
35	1843 Khanapúr	2,400	46	Jairám Yedneshwar	Ditto ..	10 0 2 9	May 1854	S. in an unsatisfactory do.	Do.
36	1838 Savadati	3,690	46	Náro Trimbak	Ditto ..	10 0 6 10	Nov 1854	Do.	Do.
37	1844 Itgi	6,000	174	Prabhu bin Subhanji	Marátha ..	10 0 6 11	Do. do.	Do. do.	S. in good order.
38	1838 Bidi	2,300	40	Verupaksh Pawadeshwar	Brahmin ..	9 0 1 11	Do. do.	Do. do.	S. in a tolerable state.
39	1854 Hookeri	2,200	80	Ránji Moreswar	Ditto ..	10 0 1 0	Do. do.	Do. do.	Do.
40	1854 Chikodi	2,817	46	Sidramápa bin Gursiapa	Ditto ..	20 0 0 4	....	....	S. recently established.
		5,094	125	Atmarám Bhikajee	Ditto ..	25 0 0 3	....	....	Do. do.
41	1826 Dharwar, Mar....	24,000	252	209	Rámchandra Moreswar	Brahmin ..	20 0 0 10	Oct 1854	Largest and best S. in the collectorate.

*Dharwar -
Collectorate.*

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APPENDIX No. XXI.

Return of Vernacular Schools in the Province of Katiawar, under the Superintendence of Bhogil Pravalabdis, Esq.

No. of Schools.	When established.	Name of Town or Village.	Estimated Population.	No. of Pupils		Name of Master, and Assistant Master.	Caste.	Pay per Mensem.	Length of Service.	When last examined.	Remarks.
				On Register.	Present at Examination.						
1	1853	Rajkote	6,000	175	156	Durgaram Mancharam	Brahmin ..	Rs. 75 0	28 7	Nov 1854	S. in a satisfactory state.
2	1852	Junagad	28,550	91	72	Trimbaknath Ramnarayan ..	Ditto ..	25 0	1 11	Dec 1854	Tolerably good teacher.
						Pranlal Mathuradas	Khatri ..	110 0	4 4	....	S. in a satisfactory state.
						Keshavram Dhirajram	Brahmin ..	15 0	2 6	....	Getting on pretty well.
						Balvantrao Dhananath	Khatri ..	15 0	2 3	....	A promising young teacher
3	1853	Nava Nagar	35,968	100	87	Gulabdas Brijbhukandas	Vania	50 0	1 11	Oct 1854	S. good, M. zealous and diligent.
4	1854	Vadhvan	16,000	89	60	Pandulal Mohanlal	Kayastha ..	50 0	1 11	Jan 1855	S. in pretty good condition.
5	1854	Dhoraji	13,700	52	47	Gopalji Surbhai	Brahmin ..	50 0	1 5	Dec 1854	M. competent and zealous.
6	1854	Morbi	14,333	32	21	Sevakaram Rajaram	Ditto ..	25 0	1 11	Oct 1854	S. not in a satisfactory state.
7	1854	Mava	6,000	134	10	Nagnidhas Mulchand	Vania	25 0	1 11	Not exd.	S. recently established.
8	1854	Palitana	5,500	141	10	Trakunlal Panachand	Ditto ..	20 0	0 9	Do. do.	Do.
9	1855	Limdi	8,000	288	10	Chaganlal Harkisandas	Ditto ..	20 0	0 9	Do. do.	Do.
10	1855	Dhrangadra	6,000	133	10	Amaritrao Mahipatrao	Brahmin ..	20 0	0 9	Do. do.	Do.
11	1851	Nagnesh	1,500	4	3	Motilal Madhurae	Ditto ..	50 0	3 11	Nov 1854	A zealous teacher. [ous.
12	1851	Chuda	1,800	6	5	Dolatram Uttanram	Ditto ..	50 0	3 6	Do. do.	M. attentive and industri-
13	1853	Gondal	8,500	15	6	Sukhdevaram Aditram	Ditto ..	50 0	1 11	Do. do.	M. rather good.
14	1851	Rajkote	6,000	16	10	Dharanji Shamji	Lavana ..	15 0	4 4	Feb 1855	M. indifferent, discontented
15	1853	Lakhtar	1,339	10	6	Ganpatram Rajaram	Brahmin ..	35 0	1 10	Nov 1854	M. good and efficient.
16	1854	Vamkaner	4,575	10	9	Umiasankar Raghunath	Ditto ..	15 0	1 3	Do. do.	M. attentive to his duty.

NOTE.—The six last schools are supported wholly by the Chiefs of the towns named.

APPENDIX No. XXII.

Return of Vernacular Schools at the Presidency, under the Superintendence of John Harkness, Esq., A.M.

No. of Schools.	When established.	Where situated.	No. of Pupils.		Name of Master, and Assistant Master.	Caste.	Pay per Month.			Length of Service.	When last examined.	Remarks.
			On Register.	Present at Examination.			Rs.	a.	p.	Y.	Mo.	
1	1824	Kavel, Mar.	79	68	Narayan Vishwanath.	Brahmin ..	30	6	45	21	9	Mar 1855 S. in good order
2	1826	Do. Guj.	217	187	Vinayak Yeswanti.	Ditto ..	18	6	31	14	8	
					Mayaram Shambunath.	Ditto ..	30	0	25	3	10	
					Pranishankar Dayabankar.	Ditto ..	10	6	46	4	5	Do. do.
					Balgovind Bhagvandas.	Vania.	15	0	39	22	1	
					Vishnuram Linabhai.	Ditto ..	12	0	21	0	5	
3	1836	Amichand's Wadi.	144	133	Mahadeva Hari.	Brahmin ..	18	6	31	10	4	Do. do.
4	1833	Vithal Vadi.	59	51	Sakharam Vasudeva Shastri.	Ditto ..	12	0	33	4	5	
5	1846	Mahum.	26	20	Janardhan Narayan.	Ditto ..	20	0	35	16	4	
6	1834	Kazi Street.	23	20	Moreswar Vishwanath.	Ditto ..	10	0	36	8	4	S. in an unsatisfactory state.
					Mahomed Husain Khat Khote.	Musliman.	25	0	42	20	6	

NOTE.—S. denotes School.
M. Master.

APPENDIX No. XXIII.

Return of Students appointed to the Public Service, in accordance with Rule VIII. of the Government Notification of May 20th, 1852.

Names.	Where Educated.	On what Salary.	In what Office.
Chungam Harjivan	Kaira Vernacular School	7 rupees.....	Collector's Office, Kaira.
Hargovand Kalandás	Surat Vernacular School No. I.	6 rupees.....	Ditto, Surat.
Raoji Pandurang	Dhoolia Vernacular School	14 rupees.....	Ditto, Dhoolia.
Vishnu Shankar Rewashankar.....	Surat Vernacular School No. I.	Not mentioned.	Adawlut, Surat.

APPENDIX No. XXIV.

LETTER FROM GOVERNMENT, FORWARDING THE REPORT OF THE GOVERNMENT EXAMINER OF THE GRANT MEDICAL COLLEGE.

No. 1663 OF 1855.

GENERAL DEPARTMENT.

TO the SECRETARY TO THE BOARD OF EDUCATION.

SIR,

I am directed by the Right Honorable the Governor in Council to forward, for the information of the Board, the accompanying copies of a letter (with accompaniments) from Dr. Don, reporting the result of the last Examination of Graduates of the Grant Medical College, and of my reply, of this date.

It is requested that these documents may be published in the next Annual Report of the Board of Education.

I have the honour to be,

Sir,

Your most obedient Servant,

(Signed) W. HART,

Secretary to Government.

Bombay Castle, 10th May 1855.

No. 1662 of 1855.

GENERAL DEPARTMENT.

To J. DON, Esq., M.D.,

Inspector General of Hospitals, and Government Examiner.

*SIR,

The Right Honorable the Governor in Council desires me to acknowledge your letter of the 6th ultimo, reporting the result of Examinations of the Students of the Grant Medical College for the Session of 1854-55, and to convey to you, and to the gentlemen who acted as Assessors on the occasion, the thanks of Government for the assistance which you have been good enough to render.

2. The Governor in Council requests that you will also express to the Principal and Professors of the Grant Medical College the satisfaction which Government have derived from a perusal of your report, and the high sense they entertain of the zeal, ability, and success with which the duties of instruction have been conducted in the College.

3. In accordance with your recommendation, the Governor in Council has already appointed Messrs. Mathias Misquitta and Rustonjee Merwanjee Sub-Assistant Surgeons on the Medical Establishment of this Presidency.

4. The Medical Board have intimated that the remaining Graduate, Hormasjee Bazumjee, has declined Government service.

5. A copy of your Report, with its accompaniments, has been furnished to the Board of Education, and the whole correspondence will be printed in their next Annual Report.*

I have, &c.

(Signed) W. HART,
Secretary to Government.

Bombay Castle, 10th May 1855.

(True copy) (Signed) W. HART,
Secretary to Government.

* The documents alluded to will be found in Appendix P, at p. xlix of the annexed report of the Grant Medical College.

APPENDIX No. XXV.

MINUTE BY DR. McLENNAN, RELATIVE TO THE PREPARATION OF A WORK ON INDIAN DISEASES BY DR. MOREHEAD.

I now beg to submit to my colleagues the proposition to which I lately adverted, when treating of the approaching departure of Dr. Morehead on sick leave. My own impression was, that in all probability eighteen months would be necessary for the purpose of recruiting his health ; but in consideration of the special nature of the leave applied for, the Medical Board restricted their recommendation to a period about which there could be no doubt, and therefore mentioned twelve months only as the time deemed requisite for his restoration to health and efficiency.

I would now submit, that the Board of Education make a suggestion to Government, in view to its transmission to the Honorable Court of Directors, that at the end of that period Dr. Morehead be requested to occupy himself in advancing the cause of Indian Medical Education, by the preparation of a work on the Diseases of India, calculated, not only for the Students educated in Indian Medical Colleges and for Indian Graduates, but also for Medical Commissioned Officers of the Honorable Company's Service on first arrival in India, and till such time as they have acquired that experience which years of service alone supply. The period necessary to bring out such a work, with the materials already accumulated by Dr. Morehead, would probably not exceed another year, and thus the whole term of absence, both on account of health and duty, would not exceed that for which leave within the limits on the old Furlough Rules has hitherto been given.

It may be well that I should say something of the grounds on which I venture to make this recommendation, and here I would

say that Dr. Morehead's experience has been varied and extensive. On first arrival in India, he served for two years with European, and for as many years with Native troops, at different stations. He was then for two years in charge of the sanatory station of Mahableshwur;—thereafter, for more than six years, resident Assistant Surgeon of the European General Hospital, Bombay—an institution in which the inmates are of very varied circumstances as to habits, position in life, nature of duties, and length of residence in India, &c. In that hospital are accommodated the newly arrived European and the old servant of many years' Indian residence—the seamen of the Royal, Indian, and Mercantile navies—the soldiers of all arms and both services, Queen's and Company's—the townsman—mechanic—clerk—male and female—adult and child—from most classes of life, and many stations in the interior. The opportunity for seeing variety of disease, therefore, under great diversity of circumstance, is considerable.

Dr. Morehead was likewise for six years Surgeon of the Byculla Schools. In parts of 1843 and 1844 he was in Sind, and had an opportunity of observing the state of health of Europeans and Natives after the sickly season of 1843.

He has been for nearly nine years Surgeon of the Jemsetjee Jejeebhoy Hospital, and for six years has been engaged in teaching Medicine and Clinical Medicine in the Grant Medical College; and the records of the Clinical Wards have been carefully preserved during the whole of this period.

He has been twelve years Secretary to the Medical and Physical Society, during which time there has been afforded him by the Medical Board the opportunity of becoming acquainted with the tenor of the medical reports and cases from all parts of the Presidency.

In 1833, and again in 1853, Dr. Morehead had the opportunity of observing some of the Hospitals and Medical Institutions in Madras, Calcutta, Colombo, &c. &c.

Very numerous papers on Dysentery—Dracunculus—Diseases of the Abdominal Viscera—Intermittent and Remittent Fevers—Delirium Tremens—Diseases of the Brain—Hepatitis and Cholera—Measles in the Byculla Schools, &c. &c. have been

inserted in the *Edinburgh Medical and Surgical Journal*, *Transactions of the Medical and Physical Society of Calcutta*, and *Transactions of the Medical and Physical Society of Bombay*.

In the last work, too, at a comparatively recent date, five papers, based on observations chiefly made in the Clinical Wards of the *Jamsetjee Jejeebhoy Hospital*, on the important subjects of Small-pox—Bright's Disease of the Kidney—Diseases of the Heart—Pneumonia—and Beri Beri—have been contributed, and there are records from which to make the same kind of observations in respect to other important diseases treated in the same wards, such as Hepatic Abscess—Dysentery—Fevers—Phthisis Pulmonalis—Paralytic Affections, &c. &c.

Having thus detailed the sources from which Dr. Morehead's experience and fitness for the task which I have ventured to suggest have been derived, I may now add a few words as to the nature of that want which I propose he should supply ; and here I honestly give it as my opinion, that till some work of the kind I suggest be brought forth, the efforts of Indian Governments and their servants in Medical Education will be incomplete. At present, Graduates and Students of Indian Medical Colleges are without any book on practice in Indian Disease, as now generally followed, or as requiring modifications to meet peculiarities of Native habit and constitution.

The duties of the Clinical Wards in the Grant Medical College have been so carried on, and so recorded, as to constitute an important collection of facts and practice, which may be brought to bear on this want. The labour of collecting, digesting, and condensing for such a work, will be considerable, and, as it is valuable for Indian purposes, should (it seems to me) receive support and encouragement from the Indian Government, which Dr. Morehead has so zealously and usefully served.

I therefore trust my colleagues will support my proposition, and recommend, that after the expiration of the leave lately granted, Dr. Morehead may have, for the above purpose, another year in England on Indian allowances, and to count as service, with the right of returning to that place in the Grant Medical College, over which he has so beneficially presided.

15th May 1854.

(Signed) JOHN McLENNAN.

APPENDIX No. XXVI.

REPORTS OF NATIVE LIBRARIES AT AHMED- NUGGUR, SHOLAPOOR, NASIK, SATTARA, RUTNAGIRI, AND TANNA.

NATIVE LIBRARY AT AHMEDNUGGUR.

TO the SECRETARY TO THE BOARD OF EDUCATION,
Bombay.

SIR,

In conformity with the Government Circular No. 3477, dated the 3rd September 1850, I have the honor to submit a report of the working of the Ahmednuggur Native Library during the past year.

On the 1st of January 1853 there was a balance, in favor of the Library, of Rupees 402-0-9 (four hundred and two, and pies nine). The subscriptions during the year amounted to Rupees 284-13-6 (two hundred and eighty-four, annas thirteen, and pies six), the interest on the sums deposited in the banker's hand to Rupees 18-6-9 (eighteen, annas six, and pies nine), the whole thus making an aggregate of Rupees 705-5-0 (seven hundred and five, and annas five).

Out of this sum, Rupees 168-4-4 (one hundred and sixty-eight, annas four, and pies four) was devoted towards current expenses, Rupees 1-4-0 (one, and annas four) to the purchase of furniture, and Rupees 79-13-6 (seventy-nine, annas thirteen, and pies six) towards newspapers and books: the balance now in hand is consequently Rupees 455-15-2 (four hundred and fifty-five, annas fifteen, and pies two).

The particulars of the receipts and disbursements will be found in Statement A.*

Statement B* shows what books were purchased by the Library during the year.

Statement C* gives the list of the books received from the Board of Education, and Statement D* a list of those received from private sources.

The Native Library is, it appears to me, in as flourishing a condition as last year; but that is more owing to the large balance at its credit than to the present monthly payments. The books and the room are continually used more by the boys of the Government school than the inhabitants generally, but even of the latter some few come to read the papers, &c.

Very good books have been lately purchased, and the choice has been made chiefly by the boys of the 1st class of the English school. I think the Library is more appreciated than it used to be, but there is much room for improvement on that score. It is well looked after by those who attend, and they certainly seem to take a pride in it.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) C. H. CAMERON,
Secretary.

Ahmednuggur, 16th May 1854.

SHOLAPÓOR NATIVE LIBRARY.

No. 1182 OF 1854.

JUDICIAL DEPARTMENT.

To the SECRETARY TO THE BOARD OF EDUCATION,
Bombay.

SIR,

In forwarding the accompanying original Report of the Sholapoor Native General Library for the past year, to be laid before

* These particulars it seems unnecessary to insert.

the Board, I have the honor to bring to their notice the services of the Secretary, Mr. Moore (who is my head clerk, and through whose instrumentality, principally, it was originally established), which the President and Members will, I feel sure, concur with me in considering most creditable to him.

2. Excepting the *Government Gazette*, I hope the Board will be pleased to recommend to Government that the Library be supplied with the other works specified in paragraph 9 of the Secretary's report, and also of the Selections from the Government Records mentioned in paragraph 10.*

3. But I am of opinion that the number of vernacular books requires to be greatly increased, in order to make the Library answer the purpose for which it has been established ; and I shall call Mr. Moore's attention to this, and request that all available funds may be expended in procuring an additional number of works in the Native languages.

4. I do not anticipate that books in languages likely to be understood by the Natives of this Zilla are to be had from Calcutta, but there are other sources nearer at hand, from which many valuable works might be procured, and the Board doubtless will not lose any opportunity of adding to the present stock.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) C. M. HARRISON,
Judge and Session Judge.

Sholapoor, Court of Adawlut, 6th December 1854.

To T. C. LOUGHNAN, Esq.,

President of the Managing Committee of the
Sholapoor Native General Library.

SIR,

I have the honor to submit, for the inspection of the Managing Committee, the Annual Account of the Sholapoor Native General

* Government were requested by the Board to supply the works alluded to, and some of them have since been supplied.

Library, from the 1st February 1853 to the 1st February 1854, showing a balance in favor of the institution of twenty-three rupees, ten annas, and four pies. I beg at the same time to submit a list of subscribers, a statement of the number and description of books, and a statement of the number of readers, in the Library, for the period in question.

2. There were 57 subscribers on the roll on the 1st February 1854, yielding a net monthly income of twenty-seven rupees, and the average receipts for the period under review was sixteen rupees per mensem. This is attributable partly to the great indifference shown by the people of Sholapoor towards the Library at the outset, and partly to the absence of many of our subscribers on duty in the districts during a great portion of the year ; many of the latter being officers, Karkoons, and others in Government employ.

3. The Committee will observe that there has been a saving of about fifty rupees per annum in house-rent, in consequence of Nainsook Soobaram having placed his bungalow at their disposal. The best thanks of the Committee will, if approved, be conveyed to that gentleman, for the liberality he has thus shown towards the institution.

4. The daily attendance of Natives at the Library has not been so satisfactory as could have been wished. I find that for some time ten or twelve persons regularly attended, at other times two or three, and frequently none at all. This falling off in the attendance of readers is evidently owing to the Library room being situated in an inconvenient locality, without the city ; but many of the subscribers say, that when the Library is removed to a more central position they will be glad to attend it every day.

5. The English and Maráthi newspapers taken in by the Library are the *Poona Observer*, the *Bombay Times* and *Telegraph and Courier* (the two latter per favor of Lieutenant Cowley), the *London Mail*, the *Dnyanodaya*, *Dnyan Prukash*, and for some time the *Dhoomketuh*, until it was found necessary, with reference to our resources, to discontinue the latter.

6. The books which appear to have been read are histories, biographies, and travels, but those chiefly sought by the Native subscribers are novels, and other light reading. It has been my

aim to exclude from the shelves of the Library every book of immoral or pernicious tendency. The stock of vernacular works, consisting of presents from the Board of Education, the Deccan Vernacular Translation Society, the Dukshuna Prize Committee, and those purchased from the money in hand, is so very limited, as to prove a serious drawback on the Library as an engine for the diffusion of useful knowledge. I am now in communication with a bookseller at Calcutta on the subject of procuring a further supply of Oriental books, and the result will be communicated for the information of the Committee in due course.

7. The Library was enriched in the early part of last year, through the recommendation of the Judge, Mr. C. M. Harrison, by the Government grant of three hundred rupees, which was at once expended in the purchase of Chambers' publications, and other valuable English books.

8. The pay of the Karkoon was originally fixed at six rupees per mensem, but finding it impossible to procure a man with the requisite qualifications for the salary, it has been deemed expedient to entertain a Librarian, possessing a competent knowledge of English and Maráthi, on ten rupees per mensem.

9. Presuming that the Government would be glad to assist the Library in every reasonable way, an application was forwarded on the 24th August last, through the medium of the then Acting Judge, Mr. Tucker, soliciting that the Committee be favored with 1 copy of the Bombay Code of Regulations, 1 copy of the Sudder Dewanee and Sudder Foujdaree Circulars, 1 copy of the Selected Cases of the Sudder Dewanee Adawlut, and 1 copy of Molesworth's Dictionary, and a copy of the *Government Gazette*, gratis; but the application for the *Gazette* was refused, on the ground that the Government could not give that to the Sholapoor Library which it had refused to the Libraries of all the other Zillas. No answer has as yet been received to the request for the books specified in the application.

10. If the Government were to present a copy of each of the books lately published under the denomination of "Selections from the Records," such as the Report on the Tanks and Wells of Bombay, the Report on the Sholapoor Collectorate, &c., the boon would be highly appreciated by the subscribers.

11. The Managing Committee for the past year stood as follows :—

T. C. Loughnan, Esq.	<i>President.</i>
The Principal Sudder Amcen	} <i>Members.</i>
The Dufturdar	
The Deputy Sudder Station Collector and Magistrate.....	
The Moonsiff of Sholapoor	
The Mamlutdar.....	
The Head Clerk of the Magistrate's Department	
Azum Jotce Krishna Limya	}
The Head Accountant	
The Sheristedar of the Zilla Court	
Azum Chinto Succaram.....	
Mr. T. Moore	<i>Secretary.</i>
The Principal Sudder Amcen	<i>Treasurer.</i>
Gunesh Wasoodeo	<i>Librarian.</i>

With the addition of the Judge's name as *Vice-President*, it is proposed to confirm this Committee another year.

12. To the kind feeling evinced by the President, Mr. Loughnan, in watching over and promoting the best interests of the Library, the Committee are in a great measure indebted for the success which has attended the opening of the institution,—a success which is heightened by the reflection that our efforts to elevate the moral and intellectual condition of the Native community of Sholapoor has been succeeded by an earnest and universal desire on the part of the people themselves to participate in the advantages which ever flow in the train of knowledge and civilization.

I have the honor to be, &c.

(Signed) THOS. MOORE,
Secretary.

Sholapoor, 25th August 1854.

NATIVE LIBRARY AT NASIK.

TO THE SECRETARY TO THE BOARD OF EDUCATION.

January, 1855.

SIR,

As I am about to resign the office of Secretary to the Nasik Native General Library (which I have held for the last fifteen months), owing to my transfer to a Mamlutdar's situation in the Peint District, I do myself the honor, at the desire of the Committee, to submit the following report, ending the year 1854, for the information of the Honorable Board, and hope that I shall not be deemed presumptuous.

2. When it was first proposed to establish a Library in this important and densely populated town, the society, considering the nature and peculiar habits of the inhabitants, mostly Brahmins, mendicants by profession, were not very sanguine of success. We determined, however, to call a meeting, and take into consideration the proposed plan; but, as anticipated, we met with little or no encouragement, objections being urged, most absurdly and inconsistently, on the score of inutility. Afterwards, through the cordial co-operation of the European and Native Government Officers, a Library was established, which is, I am happy to state, in a prosperous state.

3. In the month of January 1853, one Babajee Nagpoorkur, Pundit, and the Government Schoolmaster at Nasik, Laxumon Nurseo Josee, proposed to establish a Library, and the preliminary meetings were held by them. In the mean time, one Ramcrishna Antajee, a Native Christian, kindly came forward, and showed his great inclination to assist in the affair, with the proviso that he should be elected the President of the Managing Committee of the institution, and be vested with two votes; but as this proposal was disapproved of by a majority of the meeting, Ramcrishna Antajee, being dissatisfied with this show of disapproval, collected his private books and furniture, and established a Library after his name, it may be said with a somewhat antagonistic spirit. The aforesaid schoolmaster and the Pundit not having been quite

successful in their endeavours, convened a third meeting, at which it was finally resolved to establish a Native General Library, and the monthly subscription, amounting to about Rupees 5, was collected, and thus this Library was established on the 31st January 1853.

4. As the institution had very inadequate subscriptions for its support, the librarians were hopeless of its long existence; but by the grace of the Almighty God, and the exertions of a few benevolent men, donations to the extent of Rupees 75 were obtained. Mr. Jenkins, the late Sub-Collector, himself paid Rupees 50. Afterwards Government promised to make a donation of books, valuing Rupees 300.

5. The aforesaid Ramcrishna Antajee, who had established a separate Library as above described, finding that his Library was not visited by the inhabitants, solicited reconciliation, and therefore, with the consent of the Managing Committee, the two Libraries were amalgamated.

6. Mr. Jenkins kindly allowed a room for the Library in the Government new palace in the centre of the town, and bestowed every attention and zeal towards it. He on the 31st March 1853 held a general meeting, at which Sirdars, Jageerdars, Shástris, and Soucars, being present, unanimously declared their eagerness to support the institution, but the monthly subscription collected at the time was not more than Rupees 8 a month. Mr. Jenkins not only presented another sum of Rupees 50, and some furniture, but exerted his best in furtherance of this benevolent object, and the community connected with the Library are very much indebted to him.

7. Mr. Jenkins having been shortly afterwards transferred, was succeeded by Mr. Turquand, whose zeal, kind attention, and exertions towards the civilization of the country gradually improved the state of this institution to its present excellence. He paid a liberal subscription (Rupees 10 per month), as an example to the men of rank and position, and, pointing out to them the useful object of the Library, induced them to support it.

8. Mr. Turquand, in his letter to your address No. 408, dated the 13th August 1853, recommended the Board of Education to present a copy of each of their vernacular publications, promised in your letter No. 155, dated 19th February

1853, and the Honorable Board supplied Maráthi, English, and Gujaráti books, and maps.

9. Mr. Turquand, with his letter to Government No. 413, dated 23rd June 1854 last, submitted for their approval a list of English books to be purchased for the use of the Library, along with a bill of charges, which has been passed by Government. The books have been purchased, as detailed in appendix.*

10. Thus for a long time our Library gradually improved; but in the mean time it met with a danger which would have terminated its existence had Mr. Turquand not interfered in the matter. The room occupied by the Library was required for the Sudder Ameen's Court, and Government at once ordered to remove the Library from the new palace. Though Government had promised to aid in procuring another locality for it, yet a suitable and convenient place in the middle of the town could not be procured; but this gentleman, after giving sufficient room for the Court, still provided a small room in the new palace, with the sanction of Government, which, on the recommendation of Mr. Turquand, repaid the expenses incurred in building up the walls and white-washing this room. From the foregoing paragraphs the Honorable Board will perceive that Mr. Turquand has taken considerably more interest than is expected from a gentleman of his rank and position, and the librarians, as well as all those who derive benefit from this institution, are highly indebted to his exertions.

11. A statement showing the receipts, expenditure, and the balance in hand, on the 1st January 1855, is appended. The balance of Rupees 312-8-0 in cash is deposited with a respectable Soucar, at an interest of $4\frac{1}{2}$ per cent.

I have the honor to be, &c.

(Signed) APPAJEE ROWJEE DEGANEKUR,
Secretary to the N. N. G. Library.

P. S.—There are altogether 42 subscribers in number, viz. 5 Europeans, and 37 Natives, and the amount of monthly subscription is about Rupees 30.

(Signed) APPAJEE ROWJEE, Secretary to N. L.

* These particulars it seems unnecessary to insert.

SATTARA NATIVE LIBRARY.

To J. N. ROSE, Esq.,
Collector of Sattara.

SIR,

Under the direction of the Managing Committee, I have the honor to submit a report of the state of the Sattara Native Library, embracing a period of about two years and a half, for the purpose of its being laid before the Board of Education at Bombay.

2. As this is the first report, I think it will not be out of place to give a brief account of the origin and progress of this valuable institution.

3. It will be nothing but justice to say that the institution owes its origin to our worthy late Commissioner, Thomas Ogilvy, Esq., whose exertions in the cause of Native education are well known.

4. Soon after his joining the appointment of Commissioner at Sattara, he conceived the idea of establishing a Library in the city, and was contemplating upon the best means of accomplishing this his object. In the meanwhile, Máhádeo Govind Shástri, Esq., the Superintendent of the Government Vernacular Schools, arrived here on a tour of inspection, to whom the Commissioner communicated his wishes, and asked him, the Superintendent, to be present at a meeting of the Jageerdars, Sirdars, and Soucars of Sattara, which he, the Commissioner, intended shortly to convene, and to explain in Maráthi the advantages of such an institution to the public.

5. Accordingly, on the 6th of July 1852, a large meeting was held in the Dhowlcha Wara, and, at the request of the Commissioner, the Superintendent fully and ably explained to the assembled Native gentlemen the objects of the meeting, and the large sum of Rupees 2,000 was subscribed before the meeting was dissolved.

6. A large and conveniently situated room was kindly placed at the disposal of the Commissioner by Her Highness the Ranee Saheb of Sattara, for the use of the Library, and here it was opened on the 24th August 1852.

7. Subsequently, a spacious room was built, adjoining the one presented by Her Highness the Ranee Saheb, from the funds of the Library, and this room has added considerably to the beauty and convenience of the institution.

8. With the view of promoting the interests of the institution, and to superintend its working, a Managing Committee was appointed; and I am happy to state, that under their fostering influence the institution has been gradually acquiring stability and importance.

9. The great exertions which Mr. Ogilvy took in founding the Sattara Library, the constant aid and advice which he and Mrs. Ogilvy gave in the purchase of books and other articles for its use, and the warm interest which they exhibited all along in the prosperity of this infant institution, call forth sincere gratitude.

10. The Library is much indebted to Government for the liberal support afforded by them. Government kindly made a grant of Rupees 1,200, and furnished the Library with many of the books and publications issued by them, and for which the Committee feel highly grateful.

11. Great praise is also due to Row Bahadoor Máhádeo Row Govind, the then Native Agent to the Commissioner, and other Native officials, for their exertions in behalf of the institution. The Committee direct me also to convey their sincere thanks to the Board of Education for the valuable present of books and publications issued under their patronage.

12. From the accompanying Statement No. I.* it will appear, that the amount of donations received in favor of the Library to the end of December last was Rupees 4,013-1-2 (four thousand and thirteen, anna one, and pies two), out of which Rupees 3,293-15-10 (three thousand two hundred and ninety-three, annas fifteen, and pies ten) were expended in building a new room, and in the purchase of English, Maráthi, and Sanskrit books, and scientific specimens in mineralogy, geology, and conchology, and furniture.

13. A large country-made terrestrial globe, and a model of a first-rate sugar-cane press, were also purchased, with a view of ultimately forming a museum in connection with the Library.

* These particulars it seems unnecessary to insert.

14. Collections from monthly subscriptions to the end of December last amounted, as will be perceived by a reference to Statement No. II,* to Rupees 892-14-0 (eight hundred and ninety-two, and annas fourteen), out of which Rupees 803-8-4 (eight hundred and three, annas eight, and pies four) have been expended in defraying the current expenses of the Library, namely the pay of the Librarian, subscription to newspapers, postage, and contingent charges.

15. It will be thus seen, that there is a balance of Rupees 808-7-0 (eight hundred and eight, annas seven) in favor of the Library funds, from both monthly subscription and donations.

16. The number of volumes, English, Maráthi, Sanskrit, &c. at present in the Library, amount to 954: of these 636 were purchased, and 318 received as presents. The following statement will show the particulars:—

Books purchased:

English ..	..	..	..	..	..	..	326
Maráthi..	..	..	..	..	..	..	256
Sanskrit..	..	..	..	..	..	..	42
Maps and illustrations	..	..	..	..	..	..	4
Gujeráti..	..	..	..	..	..	..	8
Total..							<u>636</u>

Books received as presents:

English ..	..	..	..	..	..	..	144
Maráthi..	..	..	..	..	..	..	115
Gujeráti..	..	..	..	..	..	..	20
Hindústáni	..	..	..	..	..	..	6
Maps and illustrations	..	..	..	..	..	..	28
Canarcse..	..	..	..	..	..	..	5
Total..							<u>318</u>

17. The Library subscribes to the following English and Marátha newspapers:—

English.

The “Bombay Gazette.” The “Friend of India.”
The “Bombay Government Gazette.” The “Home News.”

* These particulars it seems unnecessary to insert.

Maráthi.

The "Dnyan Prukash."

The "Vurtman Deepeecca."

The "Dhoomketuh."

Besides these, a recently issued Maráthi monthly pamphlet, the "Chandrika," is also purchased.

18. The number of subscribers to the Library, as will be seen from the accompanying Statement No. III.* is 90, but the number of regular readers is rather limited. It is, however, hoped that the English and vernacular schools will soon supply the deficiency.

19. I may mention, that the Government have been lately requested, through the Commissioner, to supply the Library with some of the publications that have been, and will be issued under their patronage, and the liberality shown by Government to this institution gives me every reason to hope that the request will be complied with.

In conclusion, I beg to state that the affairs of this institution appear to be in a prosperous condition.

I have the honor to be,

Sir,

Your most obedient Servant,

. . . (Signed) VISHNOO MORESHWAR BHIREH,
Secretary.

Sattara Library, 30th January 1855.

RUTNAGIRI NATIVE LIBRARY.

No. 2 OF 1855.

To M. STOVELL, Esq.,

Secretary to the Board of Education;

Bombay.

Native Library, Rutnagiri, 22nd February 1855.

SIR,

With reference to the Government Circular No. 3477, dated 3rd September 1850, I am directed by the Managing Committee of

* These particulars it seems unnecessary to insert.

the Rutnagiri Native Library, to forward a report of the progress of the institution, for transmission to the Board of Education.

The Library originated in the year 1850, when a Reading Club, supported by private subscription, was established by myself, the masters of the vernacular schools, and some of the pupils in connection with the Dnyanprasarak Subha of Rutnagiri. The few books that were collected were lent by individual subscribers, and placed in a room in the English school. A Maráthi newspaper was subscribed for, and circulated amongst the members.

In 1851 the circle of subscribers was increased. Several European gentlemen became members. The Deccan Vernacular Society, and the Board of Education, when applied to, sent a donation of books. The institution was still, however, little more than a Reading Club, connected with the English school, where the books and papers were kept.

In 1852, an addition was made to the collection of books and papers. In 1853, it was considered desirable to have a separate building for the institution, and at the suggestion of Mr. Coles, the then Collector, and Mr. C. H. Cameron, when Acting Senior Assistant Judge, a subscription list was circulated for this object, and a sum of Rupees 500-2-0 was subscribed by Natives alone. The building was then commenced, but as the sum collected was not found sufficient for its completion, the European residents were solicited to join, and an additional sum of Rupees 365 was collected from them in June 1854.

The building was completed in July 1854, and the Library regularly opened on the 4th of August last. The ground for the building was given by Mr. Govind Wasoodo Burwey.

At a general meeting of subscribers and members, held on 26th June 1854, the accounts of the Reading Club, up to that date, were passed and audited, a new set of rules was framed, and the following gentlemen elected to serve on the Managing Committee :—

J. H. Trott, Esq. *President.*

Mr. Babji Govind Agase

Mr. Janardhan Hari Atle

Mr. Kashináth Ramchandra Kibe

Mr. Noor Mahomed Beg Mogal

Mr. Goolam Mohidin Lula

} *Members.*

Mr. Vishnu Bhikaji Phadke..... *Treasurer.*

Mr. Ramchandra Dinanathji..... *Secretary.*

A copy of the rules so framed, with the amendments that have been since made, is herewith submitted, marked A* ; also an account of all receipts and disbursements, marked B,* a catalogue of the books in the Library, showing how they were acquired, whether by purchase or by presentation, and the names of the donors, marked C,* a list of dead stock, marked D.*

The Library now numbers 44 subscribers—of whom 2 pay two rupees monthly ; 11 pay one rupee monthly ; 5 pay half a rupee monthly ; and 26 pay four annas monthly.

Of these 10 are Europeans, and 34 Natives. The average amount collected by monthly subscription is Rupees 25, which, as compared with the previous year, exhibits an increase of Rupees 14.

The subjoined is the table showing the number of books which are in the possession of the Library, including purchases and presents :—

English	books..	..	..	..	..	..	182
Maráthi	ditto ..	..	..	..	..	..	137
Hindústáni	ditto ..	..	..	..	..	..	58
Gujeráti	ditto ..	..	..	..	..	..	20
Canarese	ditto ..	..	..	..	..	..	4
Sanskrit	ditto ..	..	..	..	..	..	12
Malaye	ditto ..	..	..	..	..	..	2
Hindi	ditto ..	..	..	..	..	..	13
Total..							428

The Library is daily frequented by the advanced pupils of the Government English and Vernacular schools. Other subscribers attend, but not so regularly as could be wished.

The current monthly expenses are as follows :—

Librarian's pay	Rs. 6
Postage on Maráthi Newspapers and Pamphlets, aggregating to about.....	2
Contingent expenses.....	1
Total..	Rs. 9

* These particulars it seems unnecessary to insert.

The Managing Committee would express their thanks to Government and the Board of Education for the support that the Library has already received. They trust that this support may be continued, and they doubt not, that under such patronage the institution, which has already made considerable progress, will become a lasting benefit to the town and district. The Managing Committee will spare no labour to secure this much to be desired end.

The thanks of the Committee are due to Messrs. Coles and Spooner, the former and present Collectors of Rutnagiri, for the aid afforded by them in the establishment of the institution, and also to those gentlemen (European and Native) who have favored it with donations of money, furniture, books, and newspapers.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) RAMCHANDRA DINANATHJEE, Secretary.

TANNA NATIVE LIBRARY.

No. 223 OF 1855.

JUDICIAL DEPARTMENT.

To the SECRETARY TO THE BOARD OF EDUCATION,

- Bombay.

SIR,

I have the honor to forward the accompanying Annual Report on the working of the Native Library at Tanna during the past year, and to request you will be good enough to lay the same before the Board.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) C. H. CAMERON,

Assist. Judge in Charge.

Konkun Court of Adawlut, Tanna, 17th February 1855.

To R. KEAYS, Esq.,
Judge of the Konkun.

Sir,

In compliance with the Government Circular Letter No. 3477, dated 3rd September 1850, I have been directed by the Committee of the Tanna Native Library to submit an annual report on the working of this institution, for transmission to the Board of Education.

There was a balance in favor of the Library on the 1st January 1854 of Rupees 528 (five hundred and twenty-eight). Since that time Rupees 612-10-0 (six hundred and twelve, and annas ten) have been received on account of subscription to the Library.

The following detail will show the expenses incurred, during the year under report, for keeping up the Library :—

Establishment charges	..	..	..	Rs. 156	0	0
House-rent ..	..	..	..	72	0	0
Contingencies	..	..	..	74	0	9
Postage ..	..	..	..	148	12	6
Subscription to newspapers	..	..	..	109	0	0
Purchase of new books	..	..	..	59	1	0
Purchase of furniture	..	..	..	65	8	0
<hr/>						
Total . . .				Rs. 684	6	3

The number of subscribers to the Library is 70, of whom 11 are Europeans, and 59 Natives; the average monthly subscription to the Library amounts to Rupees 51-12-0, which, as compared with the previous year, exhibits a decrease of Rupees 10.

The subjoined is the table showing the numbers of volumes which are in the possession of the Library, including purchases and presents :—

English volumes	..	..	..	..	..	523
Vernacular books	..	..	..	..	..	130
Gujeráti ditto	..	..	..	..	..	80
Hindústáni ditto	..	..	..	..	..	17
Oordoo ditto	..	..	..	..	..	24
Canarese ditto	..	..	..	..	..	4
Portuguese ditto	..	..	..	..	..	2

Malay books	2
Maps and illustrations	13
Pamphlets	80
	<hr/>
Total..	875

I am happy to report that the Library is in possession of all the newspapers, periodicals, and pamphlets, of which a few are subscribed for, the rest being supplied gratis through the medium of some Europeans, Native members, and editors.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) GANPATRAO JAIRAM,
Native Secretary.

Tanna, 17th February 1855.

APPENDIX No. XXVII.

No. 1178 of 1855.

GENERAL DEPARTMENT.

To the BOARD OF EDUCATION.

GENTLEMEN,

I am directed by the Right Honorable the Governor in Council to forward to you copies of the correspondence, &c. quoted in the margin, and to intimate to you, that the first step which His Lordship in Council has considered it advisable to take, in pursuance of the instructions contained in paragraph 20 of the Honorable Court's Despatch of the 19th July last, has been to appoint Mr. Claudius James Erskine, of the Civil Service, to be Director of Public Instruction in this Presidency.

2. His Lordship in Council has desired me, with reference to paragraphs 15 and 17 of the above Despatch, to express to you the great pleasure which it gives him, that it has fallen to his lot to have to communicate to you the meed of commendation and thanks which they contain,—an honorable testimony, which the

Board of Education have fairly earned by the disinterested and judicious exercise of the functions entrusted to them.

3. In making the appointment now announced to you Government have done so in the hope that you will, until the close of the current official year, consent to continue to discharge the ordinary duties of your Board as heretofore, and that you will then furnish the usual Annual Report of your proceedings, and of the state of the schools under your supervision.

4. The Director of Public Instruction will be requested to obtain information regarding those institutions which exist throughout the Presidency, unconnected as yet with the Government Educational Department, but which will have claims to become affiliated to the proposed University or to participate in the boon of grants in aid; and the Governor in Council is confident, that in the inquiries which he may find requisite for obtaining this or any other information connected with the state of Education in the Presidency, he may rely on the assistance and co-operation of the Board of Education.

5. Some time may probably elapse before His Lordship in Council is in a position to definitively apply for the further assistance adverted to in paragraphs 17 and 33 of the Honorable Court's Despatch, as still hoped for from your Board, but he is confident that, when he is able to do so, it will be freely afforded.

I have the honor to be,

Gentlemen,

Your most obedient Servant,

(Signed) W. HART,

Secretary to Government.

Bombay Castle, 19th March 1855.

Copy of a Despatch from the Court of Directors of the East India Company to the Governor General of India in Council, dated July 19th, 1854, No. 49.

1. It appears to us that the present time, when by an Act of the Imperial Legislature the responsible trust of the Government of India has again been placed in our hands, is peculiarly suitable for the review of the progress which has already been made, the supply of existing deficiencies, and the adoption of such improvements as may be best calculated to secure the ultimate benefit of the people committed to our charge.

2. Among many subjects of importance, none can have a stronger claim to our attention than that of Education. It is one of our most sacred duties to be the means, as far as in us lies, of conferring upon the natives of India those vast moral and material blessings which flow from the general diffusion of useful knowledge, and which India may, under Providence, derive from her connexion with England. For, although British influence has already, in many remarkable instances, been applied with great energy and success to uproot demoralising practices, and even crimes of a deeper dye, which for ages had prevailed among the natives of India, the good results of those efforts must, in order to be permanent, possess the further sanction of a general sympathy in the native mind which the advance of education alone can secure.

3. We have, moreover, always looked upon the encouragement of education as peculiarly important, because calculated “not only to produce a higher degree of intellectual fitness, but to raise the moral character of those who partake of its advantages, and so to supply you with servants to whose probity you may with increased confidence commit offices of trust” in India, where the well-being of the people is so intimately connected with the truthfulness and ability of officers of every grade in all departments of the State.

Public letter to
Bengal, 5th September
1827.

4. • Nor, while the character of England is deeply concerned in the success of our efforts for the promotion of education, are her material interests altogether unaffected by the advance of European knowledge in India : this knowledge will teach the natives of India the marvellous results of ~~the~~ employment of labour and capital, rouse them to emulate us in the development of the vast resources of their country, guide them in their efforts, and gradually, but certainly, confer upon them all the advantages which accompany the healthy increase of wealth and commerce ; and, at the same time, secure to us a larger and more certain supply of many articles necessary for our manufactures, and extensively consumed by all classes of our population, as well as an almost inexhaustible demand for the produce of British labour.

5. We have from time to time given careful attention and encouragement to the efforts which have hitherto been made for the spread of education, and we have watched with deep interest the practical results of the various systems by which those efforts have been directed. The periodical reports of the different Councils and Boards of Education, together with other official communications upon the same subject, have put us in possession of full information as to those educational establishments which are under the direct control of Government ; while the evidence taken before the Committees of both Houses of Parliament upon Indian affairs has given us the advantage of similar information with respect to exertions made for this purpose by persons unconnected with Government, and has also enabled us to profit by a knowledge of the views of those who are best able to arrive at sound conclusions upon the question of education generally.

6. Aided, therefore, by ample experience of the past, and the most competent advice for the future, we are now in a position to decide on the mode in which the assistance of Government should be afforded to the more extended and systematic promotion of general education in India, and on the measures which should at once be adopted to that end.

7. Before proceeding further, we must emphatically declare, that the education which we desire to see extended in India is that which has for its object the diffusion of the improved arts, science,

philosophy, and literature of Europe ; in short, of European knowledge.

8. The systems of science and philosophy which form the learning of the East abound with grave errors, and Eastern literature is at best very deficient as regards all modern discovery and improvements ; Asiatic learning, therefore, however widely diffused, would but little advance our object. We do not wish to diminish the opportunities which are now afforded, in special institutions, for the study of Sanskrit, Arabic, and Persian literature, or for the cultivation of those languages, which may be called the classical languages of India. An acquaintance with the works contained in them is valuable for historical and antiquarian purposes, and a knowledge of the languages themselves is required in the study of Hindoo and Mahomedan law, and is also of great importance for the critical cultivation and improvement of the vernacular languages of India.

9. We are not unaware of the success of many distinguished Oriental scholars in their praiseworthy endeavours to ingraft upon portions of Hindoo philosophy the germs of sounder morals, and of more advanced science ; and we are far from underrating the good effect which has thus been produced upon the learned classes of India, who pay hereditary veneration to those ancient languages, and whose assistance in the spread of education is so valuable, from the honorable and influential position which they occupy among their fellow-countrymen. But such attempts, although they may usefully co-operate, can only be considered as auxiliaries, and would be a very inadequate foundation for any general scheme of Indian education.

10. We have also received most satisfactory evidence of the high attainments in English literature and European science which have been acquired of late years by some of the natives of India. But this success has been confined to but a small number of persons ; and we are desirous of extending far more widely the means of acquiring general European knowledge, of a less high order, but of such a character as may be practically useful to the people of India in their different spheres of life. To attain this end it is necessary, for the reasons which we have

given above, that they should be made familiar with the works of European authors, and with the results of the thought and labour of Europeans on the subjects of every description upon which knowledge is to be imparted to them ; and to extend the means of imparting this knowledge must be the *object* of any general system of education.

11. We have next to consider the manner in which our object is to be effected ; and this leads us to the question of the *medium* through which knowledge is to be conveyed to the people of India. It has hitherto been necessary, owing to the want of translations or adaptations of European works in the vernacular languages of India, and to the very imperfect shape in which European knowledge is to be found in any works in the learned languages of the East, for those who desired to obtain a liberal education, to begin by the mastery of the English language as a key to the literature of Europe ; and a knowledge of English will always be essential to those natives of India who aspire to a high order of education.

12. In some parts of India, more especially in the immediate vicinity of the Presidency towns, where persons who possess a knowledge of English are preferred to others in many employments, public as well as private, a very moderate proficiency in the English language is often looked upon by those who attend school instruction as the end and object of their education, rather than as a necessary step to the improvement of their general knowledge. We do not deny the value in many respects of the mere faculty of speaking and writing English, but we fear that a tendency has been created in these districts unduly to neglect the study of the vernacular languages.

13. It is neither our aim nor desire to substitute the English language for the vernacular dialects of the country. We have always been most sensible of the importance of the use of the languages which alone are understood by the great mass of the population. These languages, and not English, have been put by us in the place of Persian in the administration of justice, and in the intercourse between the officers of Government and the people. It is indispensable, therefore, that in any general system

of education the study of them should be assiduously attended to. And any acquaintance with improved European knowledge which is to be communicated to the great mass of the people—whose circumstances prevent them from acquiring a high order of education, and who cannot be expected to overcome the difficulties of a foreign language—can only be conveyed to them through one or other of these vernacular languages.

14. In any general system of education, the English language should be taught where there is a demand for it; but such instruction should always be combined with a careful attention to the study of the vernacular language of the district, and with such general instruction as can be conveyed through that language. And while the English language continues to be made use of, as by far the most perfect *medium* for the education of those persons who have acquired a sufficient knowledge of it to receive general instruction *through* it, the vernacular languages must be employed to teach the far larger classes who are ignorant of, or imperfectly acquainted with English. This can only be done effectually through the instrumentality of masters and professors, who may, by themselves knowing English, and thus having full access to the latest improvements in knowledge of every kind, impart to their fellow-countrymen, through the medium of their mother tongue, the information which they have thus obtained. At the same time, and as the importance of the vernacular languages becomes more appreciated, the vernacular literature of India will be gradually enriched by translations of European books, or by the original compositions of men whose minds have been imbued with the spirit of European advancement, so that European knowledge may gradually be placed in this manner within the reach of all classes of the people. We look, therefore, to the English language and to the vernacular languages of India together, as the *media* for the diffusion of European knowledge; and it is our desire to see them cultivated together in all schools in India of a sufficiently high class to maintain a schoolmaster possessing the requisite qualifications.

15. We proceed now to the machinery which we propose to

establish for the superintendence and direction of education. This has hitherto been exercised, in our Presidencies of Bengal, Madras, and Bombay, by Boards and Councils of Education, composed of European and Native gentlemen, who have devoted themselves to this duty with no other remuneration than the consciousness of assisting the progress of learning and civilisation ; and, at the same time, with an earnestness and ability which must command the gratitude of the people of India, and which will entitle some honoured names amongst them to a high place among the benefactors of India and of the human race.

16. The Lieutenant Governor of Agra has, since the separation of the educational institutions of the North Western Provinces from those of Bengal, taken upon himself the task of their management ; and we cannot allow this opportunity to pass without the observation that, in this, as in all other branches of his administration, Mr. Thomason displayed that accurate knowledge of the condition and requirements of the people under his charge, and that clear and ready perception of the practical measures best suited for their welfare, which make his death a loss to India, which we deplore the more deeply as we fear that his unremitting exertions tended to shorten his career of usefulness.

17. We desire to express to the present Boards and Councils of Education our sincere thanks for the manner in which they have exercised their functions, and we still hope to have the assistance of the gentlemen composing them in furtherance of a most important part of our present plan ; but, having determined upon a very considerable extension of the general scope of our efforts, involving the simultaneous employment of different agencies, some of which are now wholly neglected, and others but imperfectly taken advantage of by Government, we are of opinion that it is advisable to place the superintendence and direction of education upon a more systematic footing ; and we have therefore determined to create an Educational Department, as a portion of the machinery of our Governments in the several Presidencies of India. We accordingly propose that an officer shall be appointed for each Presidency and Lieutenant Governorship, who shall be specially charged with the management of the business connected

with education, and be immediately responsible to Government for its conduct.

18. An adequate system of inspection will also, for the future, become an essential part of our educational system ; and we desire that a sufficient number of qualified inspectors be appointed, who will periodically report upon the state of those colleges and schools which are now supported and managed by Government, as well as of such as will hereafter be brought under Government inspection, by the measures that we propose to adopt. They will conduct, or assist at, the examination of the scholars at these institutions, and generally, by their advice, aid the managers and schoolmasters in conducting colleges and schools of every description throughout the country. They will necessarily be of different classes, and may possess different degrees of acquirement, according to the higher or lower character of the institutions which they will be employed to visit ; but we need hardly say that, even for the proper inspection of the lower schools, and with a view to their effectual improvement, the greatest care will be necessary to select persons of high character and fitting judgment for such employment. A proper staff of clerks and other officers will, moreover, be required for the educational departments.

19. Reports of the proceedings of the inspectors should be made periodically, and these, again, should be embodied in the annual reports of the heads of the educational departments, which should be transmitted to us, together with statistical returns (to be drawn up in similar forms in all parts of India), and other information of a general character relating to education.

20. We shall send copies of this despatch to the Governments of Fort St. George and of Bombay, and direct them at once to make provisional arrangements for the superintendence and inspection of education in their respective Presidencies. Such arrangements as they may make will be reported to you for sanction. You will take similar measures in communication with the Lieutenant Governors of Bengal and of Agra, and you will also provide in such manner as may seem advisable for the wants of the Non-regulation Provinces in this respect. We desire that your proceedings in this matter may be reported to us

with as little delay as possible ; and we are prepared to approve of such an expenditure as you may deem necessary for this purpose.

21. In the selection of the heads of the educational departments, the inspectors, and other officers, it will be of the greatest importance to secure the services of persons who are not only best able, from their character, position, and acquirements, to carry our objects into effect, but who may command the confidence of the natives of India. It may perhaps be advisable that the first heads of the educational department, as well as some of the inspectors, should be members of our Civil Service ; as such appointments in the first instance would tend to raise the estimation in which these offices will be held, and to show the importance we attach to the subject of education, and also as amongst them you will probably find the persons best qualified for the performance of the duty. But we desire that neither these offices, nor any others connected with education, shall be considered as necessarily to be filled by members of that service, to the exclusion of others, Europeans or Natives, who may be better fitted for them ; and that, in any case, the scale of their remuneration shall be so fixed as publicly to recognise the important duties they will have to perform.

22. We now proceed to sketch out the general scheme of the measures which we propose to adopt. We have endeavoured to avail ourselves of the knowledge which has been gained from the various experiments which have been made in different parts of India for the encouragement of education ; and we hope, by the more general adoption of those plans which have been carried into successful execution in particular districts, as well as by the introduction of other measures which appear to be wanting, to establish such a system as will prove generally applicable throughout India, and thus to impart to the educational efforts of our different Presidencies a greater degree of uniformity and method than at present exists.

23. We are fully aware that no general scheme would be applicable in all its details to the present condition of all portions of our Indian territories, differing, so widely as they do, one from another, in many important particulars. It is difficult, moreover,

for those who do not possess a recent and practical acquaintance with particular districts, to appreciate the importance which should be attached to the feelings and influences which prevail in each ; and we have, therefore, preferred confining ourselves to describing generally what we wish to see done, leaving to you, in communication with the several local Governments, to modify particular measures so far as may be required, in order to adapt them to different parts of India.

24. Some years ago, we declined to accede to a proposal made by the Council of Education, and transmitted to us, with the recommendation of your Government, for the institution of an University in Calcutta. The rapid spread of a liberal education among the natives of India since that time, the high attainments shown by the native candidates for Government scholarships, and by native students in private institutions, the success of the Medical Colleges, and the requirements of an increasing European and Anglo-Indian population, have led us to the conclusion that the time is now arrived for the establishment of Universities in India, which may encourage a regular and liberal course of education, by conferring Academical degrees as evidences of attainments in the different branches of art and science, and by adding marks of honor for those who may desire to compete for honorary distinction.

25. The Council of Education, in the proposal to which we have alluded, took the London University as their model ; and we agree with them, that the form, government, and functions of that University (copies of whose charters and regulations we enclose for your reference) are the best adapted to the wants of India, and may be followed with advantage, although some variation will be necessary in points of detail. *

26. The Universities in India will accordingly consist of a Chancellor, Vice-Chancellor, and Fellows, who will constitute a Senate.* The Senates will have the management of the funds of the Universities, and frame regulations for your approval, under which periodical examinations may be held in the different branches of art and science, by examiners selected from their own body, or nominated by them.

27. The function of the Universities will be to confer degrees

upon such persons as, having been entered as candidates according to the rules which may be fixed in this respect, and having produced, from any of the "affiliated institutions," which will be enumerated on the foundation of the Universities, or be from time to time added to them by Government, certificates of conduct, and of having pursued a regular course of study for a given time, shall have also passed at the Universities such an examination as may be required of them. It may be advisable to dispense with the attendance required at the London University for the matriculation examination, and to substitute some mode of entrance examination which may secure a certain amount of knowledge in the candidates for degrees, without making their attendance at the Universities necessary, previous to the final examination.

28. The examinations for degrees will not include any subjects connected with religious belief; and the affiliated institutions will be under the management of persons of every variety of religious persuasions. As in England, various institutions in immediate connexion with the Church of England, the Presbyterian College at Caermarthen, the Roman Catholic College at Oscott, the Wesleyan College at Sheffield, the Baptist College at Bristol, and the Countess of Huntingdon's College at Cheshunt, are among the institutions from which the London University is empowered to receive certificates for degrees, so in India, institutions conducted by all denominations of Christians, Hindoos, Mahomedans, Parsees, Sikhs, Bhuddists, Jains, or any other religious persuasions, may be affiliated to the Universities, if they are found to afford the requisite course of study, and can be depended upon for the certificates of conduct which will be required.

29. The detailed regulations for the examination for degrees should be framed with a due regard for all classes of the affiliated institutions; and we will only observe upon this subject, that the standard for common degrees will require to be fixed with very great judgment. There are many persons who well deserve the distinction of an Academical degree, as the recognition of a liberal education, who could not hope to obtain it, if the examination was as difficult as that for the Senior Government Scholarships; and the standard required should be such as to command respect, without discouraging the efforts of deserving Students,

which would be a great obstacle to the success of the Universities. In the competitions for honors, which, as in the London University, will follow the examinations for degrees, care should be taken to maintain such a standard as will afford a guarantee for high ability and valuable attainments; the subjects for examination being so selected as to include the best portions of the different schemes of study pursued at the affiliated institutions.

30. It will be advisable to institute, in connexion with the Universities, Professorships for the purpose of the delivery of lectures in various branches of learning, for the acquisition of which, at any rate in an advanced degree, facilities do not now exist in other institutions in India. Law is the most important of these subjects; and it will be for you to consider whether, as was proposed in the plan of the Council of Education to which we have before referred, the attendance upon certain lectures, and the attainment of a degree in law, may not, for the future, be made a qualification for Vakeels and Moonsiffs, instead of, or in addition to, the present system of examination, which must, however, be continued in places not within easy reach of an University.

31. Civil Engineering is another subject of importance, the advantages of which, as a profession, are gradually becoming known to the natives of India; and while we are inclined to believe that instruction of a practical nature, such as is given at the Thomason College of Civil Engineering at Roorkee, is far more useful than any lectures could possibly be, Professorships of Civil Engineering might perhaps be attached to the Universities, and Degrees in Civil Engineering be included in their general scheme.

32. Other branches of useful learning may suggest themselves to you, in which it might be advisable that lectures should be read, and special Degrees given; and it would greatly encourage the cultivation of the Vernacular languages of India that Professorships should be founded for those languages, and, perhaps, also for Sanskrit, Arabic, and Persian. A knowledge of the Sanskrit language, the root of the Vernaculars of the greater part of India, is more especially necessary to those who are engaged

in the work of composition in those languages; while Arabic, through Persian, is one of the component parts of the Urdu language, which extends over so large a part of Hindoostan, and is, we are informed, capable of considerable development. The grammar of these languages, and their application to the improvement of the spoken languages of the country, are the points to which the attention of these Professors should be mainly directed: and there will be an ample field for their labours unconnected with any instruction in the tenets of the Hindoo or Mahomedan religions. We should refuse to sanction any such teaching, as directly opposed to the principle of religious neutrality to which we have always adhered.

33. We desire that you take into your consideration the institution of Universities at Calcutta and Bombay, upon the general principles which we have now explained to you, and report to us upon the best method of procedure, with a view to their incorporation by Acts of the Legislative Council of India. The offices of Chancellor and Vice-Chancellor will naturally be filled by persons of high station, who have shown an interest in the cause of education; and it is in connexion with the Universities that we propose to avail ourselves of the services of the existing Council of Education at Calcutta, and Board of Education at Bombay. We wish to place these gentlemen in a position which will not only mark our sense of the exertions which they have made in furtherance of education, but will give it the benefit of their past experience of the subject. We propose, therefore, that the Council of Education at Calcutta, and the Board of Education at Bombay, with some additional members to be named by the Government, shall constitute the Senate of the University at each of those Presidencies.

34. The additional members should be so selected as to give to all those who represent the different systems of education which will be carried on in the affiliated Institutions—including Natives of India, of all religious persuasions, who possess the confidence of the native communities—a fair voice in the Senates. We are led to make these remarks, as we observe that the plan of the Council of Education, in 1845, for the constitution of the Senate of the proposed Calcutta University, was not sufficiently comprehensive.

35. We shall be ready to sanction the creation of an University at Madras, or in any other part of India, where a sufficient number of institutions exist from which properly qualified candidates for degrees could be supplied ; it being in our opinion advisable that the great centres of European government and civilization in India should possess Universities similar in character to those which will now be founded, as soon as the extension of a liberal education shows that their establishment would be of advantage to the native communities.

36. Having provided for the general superintendence of education, and for the institution of Universities, not so much to be in themselves places of instruction, as to test the value of the education obtained elsewhere, we proceed to consider, first, the different classes of Colleges, and schools, which should be maintained in simultaneous operation, in order to place within the reach of all classes of the natives of India the means of obtaining improved knowledge suited to their several conditions of life ; and secondly, the manner in which the most effectual aid may be rendered by Government to each class of educational institutions.

37. The candidates for University Degrees will, as we have already explained, be supplied by Colleges affiliated to the Universities. These will comprise all such institutions as are capable of supplying a sufficiently high order of instruction in the different branches of art and science, in which University degrees will be accorded. The Hindoo, Hoogly, Dacca, Kishnagur, and Berhampore Government Anglo-Vernacular Colleges, the Sanskrit College, the Mahomedan Madrissas, and the Medical College, in Bengal ; the Elphinstone Institution, the Poona College, and the Grant Medical College, in Bombay ; the Delhi, Agra, Benares, Bareilly, and Thomason Colleges, in the North-Western Provinces ; seminaries, such as the Oriental Seminary in Calcutta, which have been established by highly educated natives, a class of places of instruction which we are glad to learn is daily increasing in numbers and efficiency ; those which, like the Parental Academy, are conducted by East Indians ; Bishop's College, the General Assembly's Institution, Dr. Duff's College, the Baptist College at Serampore, and other institutions under the superintendence of different religious bodies and Missionary Societies ; will, at once, supply a

considerable number of educational establishments, worthy of being affiliated to the Universities, and of occupying the highest place in the scale of general instruction.

38. The affiliated institutions will be periodically visited by Government Inspectors ; and a spirit of honourable rivalry, tending to preserve their efficiency, will be promoted by this, as well as by the competition of their most distinguished students for University honours. Scholarships should be attached to them, to be held by the best students of lower schools ; and their scheme of education should provide, in the Anglo-Vernacular colleges, for a careful cultivation of the vernacular languages ; and, in the Oriental colleges, for sufficient instruction in the English and vernacular languages, so as to render the studies of each most available for that general diffusion of European knowledge which is the main object of education in India.

39. It is to this class of institutions that the attention of Government has hitherto been principally directed, and they absorb the greater part of the public funds, which are now applied to educational purposes. The wise abandonment of the early views with respect to native education, which erroneously pointed to the classical languages of the East as the *media* for imparting European knowledge, together with the small amount of pecuniary aid which, in the then financial condition of India, was at your command, has led, we think, to too exclusive a direction of the efforts of Government towards providing the means of acquiring a very high degree of education for a small number of natives of India, drawn, for the most part, from what we should here call the higher classes.

40. It is well that every opportunity should have been given to those classes for the acquisition of a liberal European education, the effects of which may be expected slowly to pervade the rest of their fellow-countrymen, and to raise, in the end, the educational tone of the whole country. We are, therefore, far from under-rating the importance, or the success, of the efforts which have been made in this direction ; but the higher classes are both able and willing, in many cases, to bear a considerable part at least of the cost of their education ; and it is abundantly evident that in some parts of India no artificial stimulus is any longer required in order

to create a demand for such an education as is conveyed in the Government Anglo-Vernacular Colleges. We have, by the establishment and support of these colleges, pointed out the manner in which a liberal education is to be obtained, and assisted them to a very considerable extent from the public funds. In addition to this, we are now prepared to give, by sanctioning the establishment of Universities, full development to the highest course of education to which the natives of India, or of any other country, can aspire; and besides, by the division of University degrees and distinctions into different branches, the exertions of highly educated men will be directed to the studies which are necessary to success in the various active professions of life. We shall, therefore, have done as much as a Government can do to place the benefits of education plainly and practically before the higher classes in India.

41. Our attention should now be directed to a consideration if possible still more important, and one which has been hitherto, we are bound to admit, too much neglected; namely, how useful and practical knowledge, suited to every station in life, may be best conveyed to the great mass of the people, who are utterly incapable of obtaining any education worthy of the name by their own unaided efforts; and we desire to see the active measures of Government more especially directed, for the future, to this object, for the attainment of which we are ready to sanction a considerable increase of expenditure.

42. Schools—whose object should be, not to train highly a few youths, but to provide more opportunities than now exist for the acquisition of such an improved education as will make those who possess it more useful members of society in every condition of life—should exist in every district in India. These schools should be subject to constant and careful inspection; and their pupils might be encouraged by scholarships being instituted at other institutions which would be tenable as rewards for merit by the best of their number.

43. We include in this class of institutions those which, like the Zillah Schools of Bengal, the District Government Anglo-Vernacular Schools of Bombay, and such as have been established by the Raja of Burdwan and other native gentlemen in different

parts of India, use the English language as the chief medium of instruction ; as well as others of an inferior order, such as the Tahsili Schools in the North-Western Provinces, and the Government Vernacular Schools in the Bombay Presidency, whose object is, however imperfectly it has been as yet carried out, to convey the highest class of instruction which can now be taught through the medium of the Vernacular languages.

44. We include these Anglo-Vernacular and Vernacular Schools in the same class, because we are unwilling to maintain the broad line of separation which at present exists between schools in which the *media* for imparting instruction differ. The knowledge conveyed is, no doubt, at the present time, much higher in the Anglo-Vernacular than in the Vernacular Schools ; but the difference will become less marked, and the latter more efficient, as the gradual enrichment of the Vernacular languages in works of education allows their schemes of study to be enlarged, and as a more numerous class of schoolmasters is raised up able to impart a superior education.

45. It is, indispensable, in order fully and efficiently to carry out our views as to these schools, that their masters should possess a knowledge of English in order to acquire, and of the Vernaculars so as readily to convey, useful knowledge to their pupils ; but we are aware that it is impossible to obtain at present the services of a sufficient number of persons so qualified, and that such a class must be gradually collected, and trained in the manner to which we shall hereafter allude. In the meantime you must make the best use which is possible of such instruments as are now at your command.

46. Lastly, what have been termed indigenous schools, should by wise encouragement, such as has been given under the system organised by Mr. Thomason in the North-Western Provinces, and which has been carried out in eight districts under the able direction of Mr. H. S. Reid in an eminently practical manner, and with great promise of satisfactory results, be made capable of imparting correct elementary knowledge to the great mass of the people. The most promising pupils of these schools might be rewarded by scholarships in places of education of a superior order.

47. Such a system as this, placed in all its degrees under efficient inspection; beginning with the humblest elementary instruction, and ending with the University test of a liberal education, the best students in each class of schools being encouraged by the aid afforded them towards obtaining a superior education as the reward of merit, by means of such a system of scholarships as we shall have to describe, would, we firmly believe, impart life and energy to education in India, and lead to a gradual, but steady, extension of its benefits to all classes of the people.

48. When we consider the vast population of British India, and the sums which are now expended upon educational efforts, which, however successful in themselves, have reached but an insignificant number of those who are of a proper age to receive school instruction, we cannot but be impressed with the almost insuperable difficulties which would attend such an extension of the present system of education by means of Colleges and Schools, entirely supported at the cost of Government, as might be hoped to supply, in any reasonable time, so gigantic a deficiency, and to provide adequate means for setting on foot such a system as we have described, and desire to see established.

49. Nor is it necessary that we should depend entirely upon the direct efforts of Government. We are glad to recognise an increased desire on the part of the native population, not only in the neighbourhood of the great centres of European civilization, but also in remoter districts, for the means of obtaining a better education; and we have evidence in many instances of their readiness to give a practical proof of their anxiety in this respect by coming forward with liberal pecuniary contributions. Throughout all ages, learned Hindoos and Mahomedans have devoted themselves to teaching, with little other remuneration than a bare subsistence; and munificent bequests have not unfrequently been made for the permanent endowment of educational institutions.

50. At the same time, in so far as the noble exertions of societies of Christians of all denominations to guide the natives of India in the way of religious truth, and to instruct uncivilized races, such as those found in Assam, in the Cossya, Garrow, and Rajmehal hills, and in various districts of Central and Southern

India (who are in the lowest condition of ignorance, and are either wholly without a religion, or are the slaves of a degrading and barbarous superstition), have been accompanied, in their educational establishments, by the diffusion of improved knowledge, they have largely contributed to the spread of that education which it is our object to promote.

51. The consideration of the impossibility of Government alone doing all that must be done in order to provide adequate means for the education of the natives of India, and of the ready assistance which may be derived from efforts which have hitherto received but little encouragement from the State, has led us to the natural conclusion that the most effectual method of providing for the wants of India in this respect will be to combine with the agency of the Government the aid which may be derived from the exertions and liberality of the educated and wealthy natives of India, and of other benevolent persons.

52. We have, therefore, resolved to adopt in India the system of grants in aid, which has been carried out in this country with very great success; and we confidentially anticipate, by thus drawing support from local resources, in addition to contributions from the State, a far more rapid progress of education than would follow a mere increase of expenditure by the Government; while it possesses the additional advantage of fostering a spirit of reliance upon local exertions and combination for local purposes, which is of itself of no mean importance to the well-being of a nation.

53. The system of grants in aid which we propose to establish in India will be based on an entire abstinence from interference with the religious instruction conveyed in the schools assisted. Aid will be given (so far as the requirements of each particular district, as compared with others, and the funds at the disposal of Government may render it possible) to all schools which impart a good secular education, provided that they are under adequate local management (by the term "local management," we understand one or more persons, such as private patrons, voluntary subscribers, or the trustees of endowments, who will undertake the general superintendence of the school, and be answerable for its permanence for some given time); and provided also that their managers consent that the schools shall

be subject to Government inspection, and agree to any conditions which may be laid down for the regulation of such grants.

54. It has been found by experience, in this and in other countries, that not only is an entirely gratuitous education valued far less by those who receive it than one for which some payment, however small, is made, but that the payment induces a more regular attendance, and greater exertion, on the part of the pupils; and, for this reason, as well as because school fees themselves, insignificant as they may be in each individual instance, will, in the aggregate, when applied to the support of a better class of masters, become of very considerable importance, we desire that grants in aid shall, as a general principle, be made to such schools only (with the exception of normal schools) as require some fee, however small, from their scholars.

55. Careful considerations will be required in framing rules for the administration of the grants; and the same course should be adopted in India which has been pursued with obvious advantage by the Committee of Council here, namely, to appropriate the grants to *specific objects*, and not (except, perhaps, in the case of normal schools) to apply them in the form of simple contributions in aid of the general expenses of a school. The augmentation of the salaries of the head teachers, and the supply of junior teachers, will probably be found in India, as with us, to be the most important objects to which the grants can ordinarily be appropriated. The foundation, or assistance in the foundation, of Scholarships for candidates from lower schools, will also be a proper object for the application of grants in aid. In some cases, again, assistance towards erecting, or repairing a school, or the provision of an adequate supply of school books, may be required; but the appropriation of the grant in each particular instance should be regulated by the peculiar circumstances of each school and district.

56. The amount, and continuance of the assistance given will depend upon the periodical reports of inspectors, who will be selected with special reference to their possessing the confidence of the native communities. In their periodical inspections, *no notice whatsoever* should be taken by them of the religious doctrines which may be taught in any school; and their duty should be

strictly confined to ascertaining whether the secular knowledge conveyed is such as to entitle it to consideration in the distribution of the sum which will be applied to grants in aid. They should also assist in the establishment of schools, by their advice, wherever they may have opportunities of doing so.

57. We confide the practical adaptation of the general principles we have laid down as to grants in aid to your discretion, aided by the educational departments of the different Presidencies. In carrying into effect our views, which apply alike to all schools and institutions, whether male or female, Anglo-Vernacular or Vernacular, it is of the greatest importance that the conditions under which schools will be assisted should be clearly and publicly placed before the natives of India. For this purpose Government notifications should be drawn up, and promulgated, in the different Vernacular languages. It may be advisable distinctly to assert in them the principle of perfect religious neutrality on which the grants will be awarded; and care should be taken to avoid holding out expectations which, from any cause, may be liable to disappointment.

58. There will be little difficulty in the application of this system of grants in aid to the higher order of places of instruction in India in which English is at present the medium of education.

59. Grants in aid will also at once give assistance to all such Anglo-Vernacular and Vernacular Schools as impart a good elementary education; but we fear that the number of this class of schools is at present inconsiderable, and that such as are in existence require great improvement.

60. A more minute and constant local supervision than would accompany the general system of grants in aid will be necessary in order to raise the character of the "indigenous schools," which are, at present, not only very inefficient in quality, but of exceedingly precarious duration, as is amply shown by the statistics collected by Mr. Adam in Bengal and Behar, and from the very important information we have received of late years from the North-Western Provinces. In organising such a system, we cannot do better than to refer you to the manner in which the operations of Mr. Reid have been conducted in the

North-Western Provinces, and to the instructions given by him to the Zillah and Pergunnah Visitors, and contained in the Appendix to his First Report.

61. We desire to see local management under Government inspection, and assisted by grants in aid, taken advantage of wherever it is possible to do so, and that no Government Colleges or Schools shall be founded for the future in any district where a sufficient number of institutions exist, capable, with assistance from the State, of supplying the local demand for education. But, in order fully to carry out the views we have expressed with regard to the adequate provision of schools throughout the country, it will probably be necessary, for some years, to supply the wants of particular parts of India by the establishment, temporary support, and management of places of education of every class in districts where there is little or no prospect of adequate local efforts being made for this purpose, but where, nevertheless, they are urgently required.

62. We look forward to the time when any general system of education entirely provided by Government may be discontinued, with the gradual advance of the system of grants in aid, and when many of the existing Government institutions, especially those of the higher order, may be safely closed, or transferred to the management of local bodies under the control of, and aided by the State. But it is far from our wish to check the spread of education in the slightest degree by the abandonment of a single school to probable decay; and we, therefore, entirely confide in your discretion, and in that of the different local authorities, while keeping this object steadily in view, to act with caution, and to be guided by special reference to the particular circumstances which affect the demand for education in different parts of India.

63. The system of free and stipendiary Scholarships, to which we have already more than once referred as a connecting link between the different grades of educational institutions, will require some revision and extension in carrying out our enlarged educational plans. We wish to see the object proposed by Lord Auckland, in 1839, of connecting the zillah schools with the

Minute, November
24th 1839, paras. 32
and 33.

central colleges, by attaching to the latter Scholarships to which the best scholars of the former might be eligible," more fully carried out; and also, as the measures we now propose assume an organized form, that the same system may be adopted with regard to schools of a lower description, and that the best pupils of the inferior schools shall be provided for by means of Scholarships in schools of a higher order, so that superior talent in every class may receive that encouragement and development which it deserves. The amount of the stipendiary Scholarships should be fixed at such a sum as may be considered sufficient for the maintenance of the holders of them at the Colleges or Schools to which they are attached, and which may often be at a distance from the home of the students. We think it desirable that this system of Scholarships should be carried out, not only in connexion with those places of education which are under the immediate superintendence of the State, but in all educational institutions which will now be brought into our general system.

64. We are, at the same time, of opinion, that the expenditure upon existing Government Scholarships, other than those to which we have referred, which amounts to a considerable sum, should be gradually reduced, with the requisite regard for the claims of the present holders of them. The encouragement of young men of ability, but of slender means, to pursue their studies, is no doubt both useful and benevolent, and we have no wish to interfere with the private endowments which have been devoted to so laudable an object, or to withdraw the additions which may have been made by us to any such endowments. But the funds at the disposal of Government are limited, and we doubt the expediency of applying them to the encouragement of the acquisition of learning, by means of stipends which not only far exceed the cost of the maintenance of the student, but in many cases are above what he could reasonably expect to gain on entering the public service, or any of the active professions of life.

65. We shall, however, offer encouragement to education which will tend to more practical results than those Scholarships. By giving to persons who possess an aptness for teaching, as well as the requisite standard of acquirements, and who are willing to

devote themselves to the profession of schoolmaster, moderate monthly allowances for their support during the time which it may be requisite for them to pass in normal schools, or classes, in order to acquire the necessary training, we shall assist many deserving students to qualify themselves for a career of practical usefulness, and one which will secure them an honourable competence through life. We are also of opinion, that admission to places of instruction, which, like the Medical and Engineering Colleges, are maintained by the State, for the purpose of educating persons for special employment under Government, might be made the rewards of industry and ability, and thus supply a practical encouragement to general education, similar to that which will be afforded by the educational service.

66. The establishment of Universities will offer considerable further inducements for the attainment of high proficiency, and thus supply the place of the present Senior Scholarships; with this additional advantage, that a greater number of subjects in which distinction can be gained will be offered to the choice of students than can be comprised in one uniform examination for a scholarship, and that their studies will thus be practically directed into channels which will aid them in the different professions of life which they may afterwards adopt.

67. In England, when systematic attempts began to be made for the improvement of education, one of the chief defects was found to be the insufficient number of qualified schoolmasters, and the imperfect method of teaching which prevailed. This led to the foundation of Normal and Model Schools, for the training of masters, and the exemplification of the best methods for the organization, discipline, and instruction of elementary schools. This deficiency has been the more palpably felt in India, as the difficulty of finding persons properly educated for the work of tuition is greater; and we desire to see the establishment, with as little delay as possible, of training schools, and classes, for masters, in each Presidency in India. It will probably be found that some of the existing institutions may be adapted, wholly or partially, to this purpose, with less difficulty than would attend the establishment of entirely new schools.

68. We cannot do better than refer you to the plan which

has been adopted in Great Britain for this object, and which appears to us to be capable of easy adaptation to India. It mainly consists, as you will perceive on reference to the Minutes of the Committee of Council, copies of which we enclose, in the selection and stipend of pupil teachers (awarding a small payment to the masters of the schools in which they are employed, for their instruction out of school hours); their ultimate removal, if they prove worthy, to normal schools; the issue to them of certificates, on the completion of their training in those normal schools; and in securing to them a sufficient salary when they are afterwards employed as schoolmasters. This system should be carried out in India, both in the Government colleges and schools, and, by means of grants in aid, in all institutions which are brought under Government inspection. The amount of the stipends to pupil teachers and students at normal schools should be fixed with great care. The former should receive moderate allowances rather above the sums which they would earn if they left school, and the stipends to the latter should be regulated by the same principle which we have laid down with respect to scholarships.

69. You will be called upon, in carrying these measures into effect, to take into consideration the position and prospects of the numerous class of natives of India who are ready to undertake the important duty of educating their fellow-countrymen. The late extension of the pension regulations of 1831 to the educational service may require to be adapted to the revised regulations in this respect; and our wish is, that the profession of schoolmaster may, for the future, afford inducements to the natives of India such as are held out in other branches of the public service. The provision of such a class of schoolmasters as we wish to see, must be a work of time; and, in encouraging the "indigenous schools," our present aim should be to improve the teachers whom we find in possession, and to take care not to provoke the hostility of this class of persons, whose influence is so great over the minds of the lower classes, by superseding them, where it is possible to avoid it. They should, moreover, be encouraged to attend the normal schools and classes which may hereafter be instituted for this class of teachers.

70. Equal in importance to the training of schoolmasters is the provision of Vernacular School-books, which shall provide European information, to be the object of study in the lower classes of schools. Something has, no doubt, been done, of late years, towards this end, but more still remains to be done, and we believe that deficiencies might be readily and speedily supplied by the adoption of a course recommended by Mr. M. Elphinstone in 1825, namely, "That the best translations of particular books, or the best elementary treatises in specified languages, should be advertised for, and liberally rewarded."

71. The aim should be, in compilations, and original compositions, (to quote from one of Mr. Adam's valuable reports upon the state of education in Bengal,) "Not to translate European works into the words and idioms of the native languages, but so to combine the substance of European knowledge with native forms of thought and sentiment as to render the school-books useful and attractive." We also refer with pleasure upon this

Report, 1850-51,
paras. 298-308.

point to some valuable observations by Mr. Reid, in his report which we have quoted before, more especially as regards instruction in geography. It is obvious that the local peculiarities of different parts of India render it necessary that the class-books in each should be especially adapted to the feelings, sympathies, and history of the people; and we will only further remark upon this subject, that the Oriental Colleges, besides generally tending, as we have before observed, to the enrichment of the vernacular languages, may, we think, be made of great use in the translation of scientific works into those languages, as has already been done to some extent in the Delhi, Benares, and Poonah Colleges.

72. We have always been of opinion that the spread of education in India will produce a greater efficiency in all branches of administration, by enabling you to obtain the services of intelligent and trustworthy persons in every department of Government; and, on the other hand, we believe that the numerous vacancies of different kinds, which have constantly to be filled up, may afford a great stimulus to education. The first object must be to select persons properly qualified to fill these situations; secondary

to this is the consideration how far they may be so distributed as to encourage popular education.

73. The resolutions of our Governor General in Council of the 10th of October 1844 gave a general preference to well-educated over uneducated men in the admissions to the public service. We perceive, with much satisfaction, from returns which we have recently received of the persons appointed since that year in the Revenue Department of Bengal, as well as from the educational reports from different parts of India, that a very considerable number of educated men have been employed under Government of late years ; and we understand that it is often not so much the want of Government employment as the want of properly qualified persons to be employed by Government, which is felt, at the present time, in many parts of India.

74. We shall not enter upon the causes which, as we foresaw, have led to the failure of that part of the resolutions which provided for the annual submission to Government of lists of meritorious students. It is sufficient for our present purpose to observe that no more than 46 persons have been gazetted in Bengal up to this time, all of whom were students in the Government colleges. In the last year for which we have returns (1852), only two persons were so distinguished ; and we can

Letter of 6th April
1852, with Returns in
Revenue Department,
Bengal.

readily believe, with the Secretary to the Board of Revenue in Bengal, that young men who have passed a difficult examination in the highest branches of philosophy and mathematics, are naturally disinclined to accept such employment as persons who intend to make the public service their profession must necessarily commence with.

75. The necessity for any such lists will be done away with by the establishment of Universities, as the acquisition of a degree, and still more the attainment of university distinctions, will bring highly educated young men under the notice of Government. The resolutions in question will, therefore, require revision, so as to adapt them practically to carry out our views upon this subject. What we desire is, that, where the other qualifications of the candidates for appointments under Government are equal, a person who has received a good education,

irrespective of the place or manner in which it may have been acquired, should be preferred to one who has not ; and that, even in lower situations, a man who can read and write be preferred to one who cannot, if he is equally eligible in other respects.

76. We also approve of the institution of examinations where practicable, to be simply and entirely tests of the fitness of candidates for the special duties of the various departments in which they are seeking employment, as has been the case in the Bombay Presidency. We confidently commit the encouragement of educated in preference to uneducated men to the different officers who are responsible for their selection ; and we cannot interfere by any further regulations to fetter their free choice in a matter of which they bear the sole responsibility.

77. We are sanguine enough to believe that some effect has already been produced by the improved education of the public service of India. The ability and integrity of a large and increasing number of the native judges, to whom the greater part of the civil jurisdiction in India is now committed, and the high estimation in which many among them are held by their fellow-countrymen, is, in our opinion, much to be attributed to the progress of education among these officers, and to their adoption along with it of that high moral tone which pervades the general literature of Europe. Nor is it among the higher officers alone that we have direct evidence of the advantage which the public derives from the employment of educated men. We quote from

the last Report of the Dacca College with particular satisfaction, as we are aware that much of the happiness of the people of India

depends upon the honesty of the officers of police :—" The best possible evidence has been furnished," say the local committee, "that some of the ex-students of the college of Dacca have completely succeeded in the arduous office of darogha. Krishna Chunder Dutt, employed as a darogha under the Magistrate of Howrah, in particular, is recommended for promotion, as having gained the respect and applause of all classes, who, though they may not practise, yet know how to admire, real honesty and integrity of purpose."

78. But, however large the number of appointments under

Government may be, the views of the natives of India should be directed to the far wider and more important sphere of usefulness and advantage which a liberal education lays open to them ; and such practical benefits arising from improved knowledge should be constantly impressed upon them by those who know their feelings, and have influence or authority to advise or direct their efforts. We refer, as an example in this respect, with mingled pleasure and regret, to the eloquent addresses delivered by the late Mr. Bethune, when President of the Council of Education, to the students of the Kishnagur and Dacca Colleges.

79. There are some other points connected with the general subject of education in India upon which we will now briefly remark. We have always regarded with special interest those educational institutions which have been directed towards training up the natives of India to particular professions, both with a view to their useful employment in the public service, and to enable them to pursue active and profitable occupations in life. The medical colleges in different parts of India have proved that, in despite of difficulties which appeared at first sight to be insurmountable, the highest attainments in medicine and surgery are within the reach of educated natives of India : we shall be ready to aid in the establishment and support of such places of instruction as the medical colleges of Calcutta and Bombay, in other parts of India. We have already alluded to the manner in which students should be supplied to these colleges, as well as to those for the training of civil engineers.

80. The success of the Thomason College of Civil Engineering at Roorkee has shown that, for the purpose of training up persons capable of carrying out the great works which are in progress under Government throughout India, and to qualify the natives of India for the exercise of a profession which, now that the system of railways and public works is being rapidly extended, will afford an opening for a very large number of persons, it is expedient that similar places for practical instruction in civil engineering should be established in other parts of India, and especially in the Presidency of Madras, where works of irrigation are so essential, not only to the prosperity of the country, but to the very existence of the people in times of drought and scarcity.

The subject has been prominently brought under your notice in the recent reports of the Public Works Commissioners for the different Presidencies; and we trust that immediate measures will be taken to supply a deficiency which is at present but too apparent.

81. We may notice, in connexion with these two classes of institutions of an essentially practical character, the Schools of Industry and Design which have been set on foot from time to time in different parts of India. We have lately received a very encouraging report of that established by Dr. Hunter in Madras; and we have also been informed that Sir Jamsetjee Jejeebhoy, with his accustomed munificence, has offered to lay out a very considerable sum upon a like school in Bombay. Such institutions as these will, in the end, be self-supporting; but we are ready to assist in their establishment by grants in aid for the supply of models, and other assistance which they may advantageously derive from the increased attention which has been paid of late years to such subjects in this country. We enclose you the copy of a report which we have received from Mr. Redgrave upon the progress of the Madras school, which may prove of great value in guiding the efforts of the promoters of any similar institutions which may hereafter be established in India. We have also perceived with satisfaction, that the attention of the Council of Education in Calcutta has been lately directed to the subject of attaching to each zillah school the means of teaching practical agriculture; for there is, as Dr. Mouat most truly observes, "no single advantage that could be afforded to the vast rural population of India that would equal the introduction of an improved system of agriculture."

Report on Public
Instruction, Bengal,
1851-52. Appendix,
page clxxi.

82. The increasing desire of the Mahomedan population to acquire European knowledge has given us much satisfaction. We perceive that the Council of Education of Bengal has this subject under consideration, and we shall receive with favour any proposition which may appear to you to be likely to supply the wants of so large a portion of the natives of India.

83. The importance of female education in India cannot be overrated; and we have observed with pleasure the evidence

which is now afforded of an increased desire on the part of many of the natives of India to give a good education to their daughters. By this means a far greater proportional impulse is imparted to the educational and moral tone of the people than by the education of men. We have already observed that schools for females are included among those to which grants in aid may be given ; and

Report on Public
Instruction, Bengal,
1849-50, page 2.

we cannot refrain from expressing our cordial sympathy with the efforts which are being made in this direction. Our Governor General in Council has declared, in a communication to the Government of Bengal, that the Government ought to give to native female education in India its frank and cordial support ; in this we heartily concur, and we especially approve of the bestowal of marks of honor upon such native gentlemen as Rao Bahádur Maganbhái Karramchand, who devoted 20,000 rupees to the foundation of two native female schools in Ahmedabad, as by such means our desire for the extension of female education becomes generally known.

84. Considerable misapprehension appears to exist as to our views with respect to religious instruction in the Government institutions. Those institutions were founded for the benefit of the whole population of India ; and, in order to effect their object, it was, and is, indispensable that the education conveyed in them should be exclusively secular. The Bible is, we understand, placed in the libraries of the colleges and schools, and the pupils are able freely to consult it. This is as it should be ; and, moreover, we have no desire to prevent, or discourage, any explanations which the pupils may, of their own free will, ask from the masters upon the subject of the Christian religion, provided that such information be given out of school hours. Such instruction being entirely voluntary on both sides, it is necessary, in order to prevent the slightest suspicion of an intention on our part to make use of the influence of Government for the purpose of proselytism, that no notice shall be taken of it by the inspectors in their periodical visits.

85. Having now finished the sketch that we proposed to give of the scheme for the encouragement of education in India, which we desire to see gradually brought into operation, we proceed to

make some observations upon the state of education in the several Presidencies, and to point out the parts of our general plan which are most deficient in each.

86. In Bengal, education through the medium of the English language has arrived at a higher point than in any other part of India. We are glad to receive constant evidence of an increasing demand for such an education, and of the readiness of the natives of different districts to exert themselves for the sake of obtaining it. There are now five Government Anglo-Vernacular colleges; and zillah schools have been established in nearly every district. We confidently expect that the introduction of the system of grants in aid will very largely increase the number of schools of a superior order; and we hope that, before long, sufficient provision may be found to exist in many parts of the country for the education of the middle and higher classes, independent of the Government institutions, which may then be closed, as has been already the case in Burdwan, in consequence of the enlightened conduct of the Rajah of Burdwan, or they may be transferred to local management.

87. Very little has, however, been hitherto done in Bengal for the education of the mass of the people, especially for their instruction, through the medium of the vernacular languages. A few vernacular schools were founded by Government in 1844, of which only 33 now remain, with 1,400 pupils, and, upon their transfer, in April 1852, from the charge of the Board of Revenue to that of the Council of Education, it appeared that "they were in a languishing state, and had not fulfilled the expectations formed on their establishment."

88. We have perused, with considerable interest, the report of Mr. Robinson, Inspector of the Assam schools, of which there appear to be 74, with upwards of 3,000 pupils. Mr. Robinson's suggestions for the improvement of the system under which they are now managed appear to us to be worthy of consideration, and to approach very nearly to the principle upon which vernacular education has been encouraged in the North-Western Provinces. We shall be prepared to sanction such measures as you may approve of, to carry out Mr. Robinson's views.

89. But the attention of the Government of Bengal should be

seriously directed to the consideration of some plan for the encouragement of indigenous schools, and for the education of the lower classes, which, like that of Mr. Thomason in the North-Western Provinces, may bring the benefits of education practically before them, and assist and direct their efforts. We are aware that the object held out by the Government of Agra to induce the agricultural classes to improve their education does not exist in Bengal; but we cannot doubt that there may be found other similar solid advantages attending elementary knowledge, which can be plainly and practically made apparent to the understandings and interests of the lower classes of Bengal.

90. We perceive that the scheme of study pursued in the Oriental colleges of Bengal is under the consideration of the Council of Education, and it appears that they are in an unsatisfactory condition. We have already sufficiently indicated our views as to those colleges, and we should be glad to see them placed upon such a footing as may make them of greater practical utility. The points which you have referred to us, in your letter of the 5th of May, relative to the establishment of a Presidency College in Calcutta, will form the subject of a separate communication.

91. In the North-Western Provinces the demand for education is so limited by circumstances fully detailed by the Lieutenant-Governor in one of his early reports, that it will probably be long before private efforts will become energetic enough to supply the place of the establishment, support, and management, by Government, of places of instruction of the highest grade, where there may be a sufficient reason for their institution.

92. At the same time, the system for the promotion of general education throughout the country, by means of the inspection and encouragement of indigenous schools, has laid the foundation of a great advancement in the education of the lower classes. Mr. Thomason ascertained, from statistical information, the lamentable state of ignorance in which the people were sunk, while the registration of land, which is necessary under the revenue settlement of the North-Western Provinces, appeared to him to offer the stimulus of a direct interest for the acquisition of so much knowledge, at least of reading and writing, of the simple

rules of arithmetic, and of land measurement, as would enable each man to look after his own rights.

93. He therefore organized a system of encouragement of indigenous schools, by means of a constant inspection by Zillah and Pergunnah visitors, under the superintendence of a visitor-general; while, at the head-quarters of each tahsildar, a school was established for the purpose of teaching "reading and writing the vernacular languages, both Urdu and Hindi accounts, and the mensuration of land." A school-house is provided by Government, and the masters of the Tahsili schools receive a small salary, and are further entitled to the tuition fees paid by the pupils, of whom none are educated gratuitously, except "on recommendation given by village schoolmasters who may be on the visitor's list." A certain sum is annually allotted to each Zillah for the reward of deserving teachers and scholars; and the attention of the visitor-general was expressly directed to the preparation of elementary school-books in the vernacular language, which are sold through the agency of the Zillah and the Pergunnah visitors. We shall be prepared to sanction the gradual extension of some such system as this to the other districts of the Agra Presidency, and we have already referred to it as the model by which the efforts of other Presidencies for the same object should be guided.

94. In the Presidency of Bombay, the character of the education conveyed in the Anglo-Vernacular colleges is almost, if not quite, equal to that in Bengal; and the Elphinstone Institution is an instance of a college conducted in the main upon the principle of grants in aid, which we desire to see more extensively carried out. Considerable attention has also been paid in Bombay to education through the medium of the vernacular languages. It appears that 216 vernacular schools are under the management of the Board of Education, and that the number of pupils attending them is more than 12,000. There are three Inspectors of the district schools, one of whom (Mahadeo Govind Shastri) is a native of India. The schools are reported to be improving, and masters trained in the Government colleges have been recently appointed to some of them with the happiest effects. These results are very creditable to the Presidency of Bombay; and we trust that

each Government school will now be made a centre from which the indigenous schools of the adjacent districts may be inspected and encouraged.

95. As the new revenue settlement is extended in the Bombay Presidency, there will, we apprehend, be found an inducement precisely similar to that which has been taken advantage of by Mr. Thomason, to make it the interest of the agricultural classes to acquire so much knowledge as will enable them to check the returns of the village accountants. We have learnt with satisfaction that the subject of gradually making some educational qualification necessary to the confirmation of these hereditary officers is under the consideration of the Government of Bombay, and that a practical educational test is now insisted upon for persons employed in many offices under Government.

96. In Madras, where little has yet been done by Government to promote the education of the mass of the people, we can only remark with satisfaction that the educational efforts of Christian Missionaries have been more successful among the Tamul population than in any other part of India; and that the Presidency of Madras offers a fair field for the adoption of our scheme of education in its integrity, by founding Government Anglo-Vernacular institutions only where no such places of instruction at present exist, which might, by grants in aid, and other assistance, adequately supply the educational wants of the people. We also perceive with satisfaction that Mr. Daniel Elliott, in a recent and most able minute upon the subject of education, stated that Mr. Thomason's plan for the encouragement of indigenous schools might readily be introduced into the Madras Presidency, where the Ryotwari settlement offers a similar practical inducement to the people for the acquisition of elementary knowledge.

97. We have now concluded the observations which we think it is necessary to address to you upon the subject of the education of the natives of India. We have declared that our object is to extend European knowledge throughout all classes of the people. We have shown that this object must be effected by means of the English language in the higher branches of instruction, and by that of the vernacular languages of India to the great mass of the people. We have directed such a system of general superin-

tendence and inspection by Government to be established, as will, if properly carried out, give efficiency and uniformity to your efforts. We propose, by the institution of Universities, to provide the highest test and encouragement of a liberal education. By sanctioning grants in aid of private efforts, we hope to call to the assistance of Government private exertions and private liberality. The higher classes will now be gradually called upon to depend more upon themselves ; and your attention has been more especially directed to the education of the middle and lower classes, both by the establishment of fitting schools for this purpose, and by means of a careful encouragement of the native schools which exist, and have existed from time immemorial, in every village, and none of which, perhaps, cannot in some degree be made available to the end we have in view. We have noticed some particular points connected with education, and we have reviewed the condition of the different Presidencies in this respect, with a desire to point out what should be imitated, and what is wanting, in each.

98. We have only to add, in conclusion, that we commit this subject to you, with a sincere belief that you will cordially co-operate with us in endeavouring to effect the great object we have in hand, and that we desire it should be authoritatively communicated to the principal officers of every district in India, that henceforth they are to consider it to be an important part of their duty, not only in that social intercourse with the natives of India which we always learn with pleasure that they maintain, but also with all the influence of their high position, to aid in the extension of education, and to support the inspectors of schools by every means in their power.

99. We believe that the measures we have determined upon are calculated to extend the benefits of education throughout India ; but at the same time, we must add that we are not sanguine enough to expect any sudden, or even speedy, results to follow from their adoption. To imbue a vast and ignorant population with a general desire for knowledge, and to take advantage of that desire when excited to improve the means for diffusing education amongst them, must be a work of many years ; which, by the blessing of Divine Providence, may largely

conduce to the moral and intellectual improvement of the mass of the natives of India.

100. As a Government, we can do no more than direct the efforts of the people, and aid them wherever they appear to require most assistance. The result depends more upon them than upon us; and although we are fully aware that the measures we have now adopted will involve in the end a much larger expenditure upon education from the revenues of India, or, in other words, from the taxation of the people of India, than is at present so applied, we are convinced, with Sir Thomas Munro, in words used many years since, that any expense which may be incurred for this object "will be amply re-paid by the improvement of the country; for the general diffusion of knowledge is inseparably followed by more orderly habits, by increasing industry, by a taste for the comforts of life, by exertion to acquire them, and by the growing prosperity of the people."

We are, &c.

(Signed) J. OLIPHANT.	(Signed) W. J. EASTWICK.
E. MACNAGHTEN.	R. D. MANGLES.
C. MILLS.	J. P. WILLOUGHBY.
R. ELLICE.	J. H. ASTELL.
J. W. HOGG.	F. CURRIE.

No. 177.

From C. BEADON, Esq.,

Secretary to the Government of India,

To the CHIEF SECRETARY TO THE
GOVERNMENT OF BOMBAY.

HOME DEPARTMENT.

Dated the 26th January 1855.

SIR,

With reference to the Despatch of the Honorable Court of Directors addressed to your Government on the 30th August last, No. 39, I am directed to forward for the information, and, so far as applicable, for the guidance of the Honorable the Governor in

Council, copy of the letters addressed to the Governments of Bengal and the North-Western Provinces, on the subject of Education, and also of the instructions given to the Committee which the Governor General in Council has appointed for preparing a scheme for the establishment of Universities in the Presidency Towns of Calcutta, Madras, and Bombay.

2. The Governor General in Council further directs me to request, that the Governor in Council will favour the Committee with a list of the persons whom it is intended should form the Senate of the future University, and with the views and opinions of the local Government in regard to the measures to be adopted for carrying out the Honorable Court's plan of an University in the Presidency of Bombay.

I have the honour to be, &c.

(Signed) C. BEADON,

Secretary to the Government of India.

Fort William, the 26th January 1855.

No. 166.

From C. BEADON, Esq.,

Secretary to the Government of India,

To W. GREY, Esq.,

Secretary to the Government of Bengal.

HOME DEPARTMENT.

Dated the 26th January 1855.

SIR,

I am now desired to communicate to you the following observations and orders of the Governor General in Council on the Despatch of the Honorable Court of Directors, No. 49, dated the 19th July last, on the subject of Education in India :—

2. The Despatch itself contains so complete an exposition of the wishes and intentions of the Honorable Court ; it lays down so clearly the principles by which the Government of India is henceforth to be guided in regard to Education ; and it indicates so plainly the general form of the system by which the instruction of the Natives of this country is to be carried on, that it is quite

unnecessary for the Governor General in Council to enter upon any general remarks on the subject. It remains for His Lordship only to consider the practical measures which should now be taken in execution of the instructions of the Honorable Court.

3. The Despatch divides its subject generally under three principal heads, and it may be most convenient to follow that distribution. These heads are—

1st.—Machinery for managing the Department.

2nd.—Establishment of Universities.

3rd.—Grants in aid.

4. With regard to the first of these it is to be observed, that the Despatch treats the organization of the new machinery as a matter which should be dealt with immediately and independently of the other subjects. To save time, the Court have authorised the Governments of Madras and Bombay to make provisional arrangements, which those Governments are to report to the Government of India for approval and sanction; and the Despatch leaves it to the Governor General in Council to “take similar measures” for Bengal and Agra, and for the Non-Regulation Provinces. The first practical step, then, to be taken, is to give authority to the Governments of Bengal and the North-Western Provinces to appoint severally an Officer to superintend the Department of Education, and a sufficient staff of Inspectors and Clerks.

5. Of the Superintending Officers it is observed in the Despatch, that it may perhaps be advisable that they, as well as some of the Inspectors, should in the first instance be members of the Civil Service, though not to be considered as necessarily so, to the exclusion of more fit persons, European or Native. It is also suggested that their remuneration should be such as publicly to recognize the importance of their duties. The Governor General in Council accordingly authorises the Lieutenant Governor of Bengal to appoint a head of the Department for the Lower Provinces, under the designation of “Director of Public Instruction,” on a salary not exceeding Rs. 3,000 a month, according to the standing of the Officer selected, so as to allow of a gradual increase to the salary, if it be fixed in the first instance at a less sum than Rs. 3,000 a month, until it reach that limit, and thereby

to retain, if desirable, the services of a competent Officer for a considerable time. His Lordship also authorises the employment of not more than four Inspectors, on salaries varying from Rs. 500 to Rs. 1,500 a month. The necessary establishment of Clerks and other Officers is left in the first instance to be fixed by the Lieutenant Governor, subject to the approval of the Governor General in Council, to whom the scheme of establishment, when matured, will have to be submitted for sanction.

6. It is only necessary to add on this head, that upon the ability and energy of the Superintending Officer, and upon the vigilance and efficiency of the Inspectors, will depend in a great measure not only the well-doing of the Government Schools, but also of the Colleges and Schools to be affiliated to the University when founded, and the success or failure of the system of grants in aid.

7. The next practical step to be taken, in the order observed in the Despatch, relates to the establishment of an University. Here, however, occurs something like an ambiguity in the Despatch, which requires to be cleared up.

8. The general impression which the whole tenor of the Despatch is calculated to leave on the mind on a first perusal is, that it is intended to convey to the Government instructions upon particular and general measures and principles which the Government is, without further reference Home, empowered and expected to carry into immediate effect. The Despatch sets out by a declaration that the Home Authorities, after ample past experience and present advice and information, "are now in a position to decide upon the mode in which the assistance of Government should be afforded to the more extended and systematic promotion of general education in India, *and on the measures which should at once be adopted to that end.*" At a subsequent place, the Universities are alluded to as "a most important part of *our present plan.*" The *immediate* appointment of Inspectors is insisted upon as necessary to the development of the new system, while an important part of the duties of the Inspectors is stated to be their periodically visiting the Institutions affiliated to the Universities. Again, the statement of "the general scheme of the measures which we propose to

adopt^d is made to include both the announcement of the plan of Universities, and also that of grants in aid, about the latter of which there can be no doubt that the Court intend their *immediate* introduction ; and the former as well as the latter, and, indeed, the description of the whole body of measures for the encouragement and extension of Education, English and Vernacular, from the establishment of Universities down to the inspection of indigenous Vernacular Schools, is prefaced by the declaration that the Court are “ *describing generally what we wish to see done*, leaving it to you, in communication with the several local Governments, to modify particular measures, so far as may be required, in order to adapt them to the different parts of India.”

9. Judging, then, from the expressions, as well as from the whole purport of the Despatch, it might have been supposed that the establishment of the Universities, like all other measures suggested or directed in the document in question, was at once to be carried into effect by the Governor General in Council ; the more especially as the University in its examinations, its connection with the superintendence over affiliated institutions, its power of making rules for the whole, subject to the approval of Government, and its function of giving degrees, seems to be almost essential to the vital energy of the new system as laid down in the Despatch.

10. In this view, it would have seemed necessary, in analogy to the course pursued on the establishment of the London University, that a Bill should forthwith be introduced into the Legislative Council, to incorporate and empower the University for its proper purposes ; and also to name and appoint the Chancellor, Vice-Chancellor, and Fellows, and provide for the filling of subsequent vacancies in their numbers. And this is the course which it would seem most reasonable and right to adopt, were it not for the wording of paragraph 33 of the Court's Despatch, in which, in apparent opposition to the general purpose of the Despatch, the Honorable Court “ desire that you take into consideration the institution of Universities at Calcutta and Bombay, upon the general principles which we have now explained to you, and report to us upon the best method of procedure, with

a view to their incorporation by Acts of the Legislative Council of India."

11. The Governor General in Council was at first inclined to think that it was the wish of the Honorable Court that the Government of India should proceed to the establishment of the Universities simultaneously with the other changes which were authorised in the Despatch. The general tenor of that document, and casual expressions contained in other letters from the Honorable Court, still seem to his Lordship to favour that interpretation. It is the one which the wishes of the Governor General in Council would incline him to adopt, and he is most reluctant to surrender it. But the language of the 33rd paragraph is so explicit and precise—it so distinctly requires the Government of India to report to the Honorable Court, with reference to the proposed Universities, "upon the best method of procedure, with a view to their incorporation by Acts of the Legislative Council of India," and it differs so markedly from the form of expression employed in paragraph 20, that there is no escape from the necessity for reporting to the Honorable Court the recommendations that may be made respecting the proposed Universities, before proceeding to give effect to them.

12. The Governor General in Council regrets this delay, but it will probably not defer the institution of the Universities more than a few months. In the mean time, it appears to His Lordship in Council, that the members of the Council of Education, relieved from their present duties, together with the other gentlemen whom it is proposed to associate with them in the future Senate, may be requested to apply themselves to the consideration of the Rules and Regulations which will be required for the governance of the Universities hereafter. Instructions will accordingly be issued to those gentlemen from this office, and the Governor General in Council hopes, that by the adoption of this course, hardly any time will practically be lost.

13. The next branch of the Despatch relates to grants in aid. Upon this head there is not room for much remark, beyond what is contained in the Despatch itself. It is stated in the Despatch, that Rules are to be framed for the administration of the grants, and the Governor General in Council desires to leave

the framing of these Rules in each Presidency to the local Government; the Rules, when framed, being submitted for the approval of the Government of India.

14. It is stated in the Despatch—*1st*, that grants are to be based on entire non-interference as to the religious instruction conveyed in the Schools assisted; *2nd*, that they are to be given, so far as the requirements of districts and the funds at disposal permit, to all Schools which give a good secular education, and are under permanent local management; *3rd*, that they are to be given to no Schools which do not require from their pupils a fee for tuition, except Normal Schools; and that they are to be given for specific objects in preference to simple pecuniary grants for general expenses. The specific objects are stated to be—augmentation of salaries of Head Teachers, supply of Junior Teachers, foundation or part foundation of Scholarships, or partly erecting or repairing a School-house, and provision of books. The amount and continuance of assistance are to depend on reports of Government Inspectors. To these conditions it may be added, that the grant should in no case exceed in amount the sum expended on the School by private persons or bodies, and that they should be carefully so given, as that the effect shall not be in any case the substitution of public for private expenditure, but the increase and improvement of Education.

15. The Governor General in Council is entirely of opinion, that these Rules should be so framed as that the local Government shall not be fettered by the necessity for referring every individual proposal for a grant in aid to the Supreme Government. It will be much better in every way that, certain rules having been prepared by the local Government regarding grants in aid, and having received the confirmation of the Governor General in Council, the local Government should be left entirely free in the distribution of the grants.

16. His Lordship in Council also thinks, that in like manner the aggregate annual amount of the grants having been fixed, the details of the expenditure should be left entirely in the hands of the local Government. It is difficult to say what the aggregate amount to be placed at the disposal of the local Governments should be, until some inquiry has been made and some experience

gained. In the mean time, the Rules may be framed, in the first instance, so as to provide for an expenditure upon grants in aid, equal to 5 per cent. upon the annual educational expenditure, and the local Government may also have authority to substitute expenditure to a given amount by a grant in aid for a similar amount of direct Government expenditure.

17. The other parts of the Despatch relate entirely to matters which may be disposed of by the Lieutenant Governor. Such, for instance, are the modifications proposed in the system of Scholarships, the establishment of Normal Schools, the preparation of Vernacular School-books, and the bestowal of public patronage on educated persons. The subject of establishing Vernacular Schools will be dealt with in a separate communication.

18. The Governor General in Council will expect to receive from the Honorable the Lieutenant Governor an Annual Report on the state and progress of Education of all kinds, within the limits of his Governorship, commencing with the official year ending the 30th April next; and His Lordship in Council hopes that these Reports will be furnished as soon as possible after the close of the period to which they refer.

I have the honour to be, &c.

(Signed) C. BEADON,

Secretary to the Government of India.

Fort William, the 26th January 1855.

(True copy)

(Signed) C. BEADON,

Secretary to the Government of India.

NOTE.—The letter (of the same date) addressed by Mr. Secretary Beadon to the Government of the North-Western Provinces is in the same terms as the above, except as regards the number and salaries of Inspectors, of whom the latter Government are authorised in paragraph 5 to employ not more than *two*, on salaries varying from Rs. 800 to Rs. 1,200 a month.

From C. BEADON, Esq.,

Secretary to the Government of India,

To the Honorable SIR J. W. COLVILL, Kt.

The Honorable J. P. GRANT.

H. RICKETTS, Esq.

C. R. PRINSEP, Esq.

D. ELLIOT, Esq.

A. MALET, Esq.

C. ALLEN, Esq.

C. BEADON, Esq.

W. G. YOUNG, Esq.

Lieutenant Colonel GOODWYN.

R. MACKINNON, Esq., M.D.

J. JACKSON, Esq., M.B., F.R.C.S.

H. WOODROW, Esq.

Lieutenant W. N. LEES.

The Rev. W. STEPHENSON.

J. C. MARSHMAN, Esq.

BABOO PROSUNNO COMAR TAGORE.

BABOO RAMAPERSAD ROY.

BABOO RAM GOPAL GHOSE.

PUNDIT ISSERCHUNDER SURMA.

HOME DEPARTMENT.

Dated the 26th January 1855.

GENTLEMEN,

The Most Noble the Governor General in Council is desirous that steps should be immediately taken to prepare the scheme of an University, to be established in Calcutta, in accordance with the desire of the Honorable Court of Directors, as expressed in their Despatch No. 49, dated the 19th July last, of which 20 printed copies are herewith forwarded for your information. The terms of the Honorable Court's Despatch preclude His Lordship in Council from establishing an University, either here or at either of the other Presidency towns, without further orders from the Home Department, but in anticipation of those orders, which, after the decided opinions embodied in the Despatch, His Lordship in Council cannot doubt will be favourable, he considers

it desirable that the details of a scheme, in accordance with the outline sketched in the Despatch, should be settled with as little delay as possible, so that Bills for the incorporation of the Universities at Calcutta, Madras, and Bombay, may at the proper time be brought into the Legislative Council, and that draft rules for examinations, for the grant of degrees, and for other cognate matters, may be ready for discussion and adoption by the Senates, so soon as those Bills are passed into law.

2. With a view to secure uniformity in all important points of principle, the Governor General in Council has come to the conclusion, that the schemes of the Madras and Bombay Universities should be framed in the first instance by the body to whom is entrusted the duty of preparing that of the Calcutta University. He thinks it of considerable importance that the three Universities should resemble each other in their main features, and especially that the Acts of Incorporation should be as nearly as possible cast in the same terms. Local circumstances will doubtless to some extent render modifications necessary; but it is essential that the legal status and authority of each University should be the same, and that at each Presidency town the same degree of acquirement in every branch of knowledge should entitle its possessor to the same kind of academical distinction and honour.

3. The Governor General in Council has accordingly been pleased to appoint you to be a Committee, for preparing a scheme for the establishment of Universities in the Presidency towns of Calcutta, Madras, and Bombay. In conformity with the wishes of the Honorable Court, His Lordship in Council has availed himself on this occasion of the willing and valuable assistance of the Honorable President, and the Members of the late Council of Education; he has added to their number several other gentlemen, whom it is the intention of the Government hereafter to associate with them in the Senate of the University of Calcutta; and he has also appointed to the Committee the Members of the Legislative Council from Madras and Bombay, whose experience of the circumstances and wants of those Presidencies will enable them to render very valuable assistance.

4. The Honorable Sir James Colvill will be the President of the Committee, and the Committee will choose its own Secretary.

The Secretary will have authority to frank, as in the Public Service, all letters relating exclusively to the business of the Committee, to indent for stationery on the public stores, and to incur such trifling contingent charges as may be necessary. If, as will be most convenient, the Secretary be already in charge of a public office, he will not require the services of a Clerk. The Committee will probably find it advisable to appoint, from among themselves, a Sub-Committee of Correspondence, to conduct the preliminary inquiries, and to frame the rough draft of a scheme for discussion by the whole Committee. His Lordship in Council would deprecate resort to written minutes by any Member of the Committee, and would recommend, as a preferable arrangement, that the scheme, when drawn up by a small Sub-Committee of Correspondence, should be discussed at a full meeting of the Committee (of which a majority may form a quorum), and settled according to the opinions of the majority of Members present.

5. The Committee will correspond with the several local Governments, and obtain from them their views and opinions in regard to the measures to be adopted for the purpose of carrying out the Honorable Court's plan of an University in the several Presidencies. From the Honorable the Lieutenant Governors of Bengal and the N. W. Provinces the Committee will receive valuable suggestions in regard to the proposed Calcutta University ; and the Honorable the Governors in Council of Madras and of Bombay will afford the Committee all requisite information respecting those to be established at the other Presidency towns. Those Governments will also be requested from hence to furnish the Committee with lists of the persons who are eventually to form the Senate of those Universities, in order that their names may be included in the Act of Incorporation.

6. The Governor General in Council is of opinion that the office of Chancellor of the University of Calcutta should be held by the Governor General for the time being, and that the Lieutenant Governors of Bengal and the N. W. Provinces, and the Members of the Council of India, should be Members of the Senate. In like manner, the Governors of Madras and Bombay should, in His Lordship's opinion, be the Chancellors, and the Members of Council of those Presidencies Members of the Senate of the Universities of Madras and Bombay.

7. It has been suggested to the Governor General in Council, that there should be two degrees in each of the subjects embraced in the design of an Indian University, viz. Literature, Mathematics, Science, Law, Civil Engineering, and Medicine, and that on the taking of each degree the student should have, as in the London University, an opportunity of taking honours. This suggestion His Lordship desires to leave to the consideration of the Committee, and eventually of the Senate, observing, that any one degree of the very low standard which seems to be contemplated by the Honorable Court would be of little value. The Governor General in Council also leaves it to the Committee to consider what titles shall be assigned to the several degrees ; but he desires to express doubts of the expediency of adopting in the Universities of India the nomenclature which has from long usage become peculiar to the Universities of England.

8. In the 30th paragraph of the Honorable Court's Despatch, allusion is made to the foundation of Professorships in connexion with the University, for the purpose of giving Lectures in certain branches of knowledge. The establishment of a general Presidency College in Calcutta has rendered unnecessary the foundation of any such Professorships here ; but if they should be required either at Madras or Bombay, there seems to be no sufficient reason for not departing to that extent from the plan of the London University, which the Honorable Court have wisely held up as the model to be generally followed in India. In that case, however, the departments of instruction and of examination should be kept distinct from each other.

9. With these observations, His Lordship in Council leaves the subject to the careful and anxious consideration of the Committee.

I have the honour to be, &c.

(Signed) CECIL BEADON,
Secretary to the Government of India.

Fort William, the 26th January 1855.

(True copy)

(Signed) CECIL BEADON,
Secretary to the Government of India.

APPENDIX No. XXVIII.

ANNUAL REPORT
OF THE
ELPHINSTONE INSTITUTION,
•
FOR THE YEAR 1854.

ANNUAL REPORT
OF THE
ELPHINSTONE INSTITUTION,
BOMBAY,
FOR THE
YEAR 1854.

Bombay:
PRINTED AT THE
BOMBAY EDUCATION SOCIETY'S PRESS.

1855.

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Establishment,

As on the 1st January 1855.

COLLEGE.

Designations.	Names.	Salaries.
<i>Principal, & Professor of English Literature, Logic, Mental and Moral Philosophy.</i>	JOHN HARKNESS, A.M.	Rs. 700
<i>Professor of History, Geography, Political Economy, and Induction</i>	R. S. SINCLAIR, M.A.	600
<i>Professor of Chemistry, Botany, and Geology</i>	HERBERT GIRAUD, M.D	200
<i>Professor of Mathematics and Natural Philosophy</i>	DADABHAI NAOROJI	400

* CENTRAL SCHOOL.

Master BAMANJI PESTANJI.

Assistant Masters.

Ardeshir Framji.	Bhairaonath Mangesh.
Jahanghir Barjodji.	Harishankar Balcrishna.
Kaikhosru Hormazji.	Babji Amritrao.
Kavazji Shapurji.	Raghunath Jagannath.
Edalji Nasarvanji.	Khurshedji Manekji.
Pestanji Jahanghirji.	Kahandas Tapidas.
Hormazji Edalji.	Harichand Janardhan.

Sanscrit Teacher.

Keshava Shastri bin Sakharam.

Persian Teacher.

Aga Mirza Pir Mahamad.

VERNACULAR TEACHERS.

Gujarāti.

Ranchoddas Ghirdharlal.
 Mansukha Narsidas.
 Parbhuram Navalram.

Maráthi.

Keshava Shastri.
 Bal Parasharam Shastri.

BRANCH SCHOOLS.

Fort.

Designations.	Names.
<i>Master</i>	Kavazji Nushirvanji.
<i>Assistant Masters</i>	Nushirvanji Naorozji.
	Edalji Nanabhai.
	Sorabji Edalji.
<i>Vernacular Teacher</i>	Chimanlal Nandalal.

Mumbadevi.

<i>Master</i>	Gangadas Keshoddas.
	Maneksha Beramji.
<i>Assistant Masters</i>	Maucherji Mervanji.
	Govind Vishnu.
	Framji Beramji.
<i>Vernacular Teacher</i>	Bhikaji Bhaskar.

ANNUAL EXAMINATION,

1854.

(Circular.)

THE Annual Examination will commence at the Institution, on Monday the 27th instant, at 11 A. M., and will be conducted in the following order, viz :—

I.—BRANCH SCHOOLS.

Language and General Knowledge.	No. of Classes.	No. of Pupils.	Days.	Arithmetic.	No. of Classes.	No. of Pupils.
Fort	4	139	<i>Monday, 27th.</i>	Mumbadevi.....	5	132
Mumbadevi	5	132	<i>Tuesday, 28th.</i>	Fort	4	130
		271				271

II.—CENTRAL SCHOOL.

Class.	Division.	No. of Classes.	No. of Pupils.	Days.	Class.	Division.	No. of Classes.	No. of Pupils.
II.	Maráthi.....	5	197	<i>Wednes., 29th</i>	VI.	{ Second	2	65
III.	{ 1st & 2nd Mar.				V.	{ Maráthi.....		
IV.	{ 1st & 2nd Guj.	4	163	<i>Thursday, 30th.</i>	V.	{ 1st & 2nd Guj.	3	116
	{ 1st, 2nd, 3rd, 4th Guj.				IV.	{ Maráthi		
IV.	{ Maráthi.....	3	111	<i>Friday, Dec. 1st.</i>	IV.	{ 1st, 2nd, 3rd, 4th Guj.	4	161
V.	{ 1st & 2nd Guj.					{ 1st & 2nd Guj.		
V.	{ Maráthi.....	2	71	<i>Satur., 2nd.</i>	III.	{ 1st & 2nd Mar.	5	200
VI.	{ Second				II.	{ Maráthi.....		
VI.	First .....	..	38		VI.	First .....	..	38
			580					580

III.—COLLEGE.

CANDIDATES FOR
CLARE SCHOLARSHIPS.

39 Competitors.

Subjects.
From 11 to 2, Paper.
From 2 to 5, Vivà voce.

Arithmetic, Mathematics.
History, Geography.
Literature and General
Knowledge.
Translation.

Days.

Monday, 4th.
Tuesday, 5th.
Wednesday, 6th.

Thursday, 7th.
Friday, 8th.
Saturday, 9th.

SECOND YEAR CLASS.

26 Students.

Subjects.
From 11 to 2, Paper.
From 2 to 5, Vivà voce.

Literature, Translation
Mathematics.
Chemistry.

History, Geography.
Mental Philosophy.
Political Economy.

FIRST YEAR CLASS.

35 Students.

Subjects.
From 11 to 2, Paper.
From 2 to 5, Vivà voce.

Chemistry.
Logic.
Translation, Literature.
History, Geography.
Mathematics.
Political Economy:

Days.

Monday, 11th.
Tuesday, 12th.
Wednesday, 13th.
Thursday, 14th.
Friday, 15th.
Saturday, 16th.

THIRD YEAR CLASS.

11 Students.

Subjects.
From 11 to 2, Paper.
From 2 to 5, Vivà voce.

Political Economy.
Mathematics.
Botany.
Moral Philosophy.
Induction.
Essay, Literature.

FOURTH YEAR CLASS.

2 Students.

Days.	Subjects. From 11 to 2, Paper. From 2 to 5, Vivà voce.
<i>Friday, 8th.</i> <i>Saturday, 9th.</i>	Physics. Ethics.*

* In other subjects, along with the Third Year Class.

PROGRAMME OF COURSE OF STUDY.
1854.

I.—BRANCH SCHOOLS, AND LOWER CENTRAL
SCHOOL.

FIRST (*Lowest*) CLASS.

English Reading.—M'Culloch's First and Second Books.

Writing.—Progressive Lessons.

Vernacular.—Moral Class-Book ; Grammar ; Outlines of Geography.

Arithmetic.—Simple Rules.

SECOND CLASS.

English Reading.—M'Culloch's Third Book.

Grammar.—Reid's Rudiments.

Writing.—Figures, Capitals, and Text.

Vernacular.—Moral Class-Book ; Grammar ; Geography.

Arithmetic.—Fractions, Vulgar and Decimal.

Vernacular and English.—School Dialogues ; Exercises on the Tenses.

THIRD CLASS.

English Reading.—Chambers' Moral Class-Book.

Grammar.—Reid's Rudiments.

Geography.—Reid's.

Arithmetic.—Thomson's : Proportion.

Writing.—Round Hand.

Vernacular.—Introduction to the History of India ; Life of Columbus ; Grammar.

Vernacular and English.—Idiomatic Exercises ; Green's Phrases.

FOURTH CLASS.

English Reading.—M'Culloch's Series of Lessons.

Grammar.—M'Culloch's.

Geography.—Reid's.

Arithmetic.—Thomson's : Interest, Practice, Involution, Evolution, Simple and Compound Proportion.

Writing.—Round Hand, Small Hand.

Vernacular.—History of British India ; History of India ; Life of Columbus ; Grammar.

Vernacular and English.—Idiomatic Exercises ; Green's Phrases.

II.—UPPER CENTRAL SCHOOL.

FIFTH CLASS.

English Reading.—M'Culloch's Course of Reading : Poetical Pieces.

Grammar.—M'Culloch's.

Geography.—Nicholl's.

History.—Wilson's Universal History.

Geometry.—Euclid, Books I—III.

Algebra.—Division, Simple Equations.

Vernacular.—Life of Columbus ; Grammar ; History of British India.

SIXTH CLASS, 2ND DIVISION.

English Reading.—M'Culloch's Course of Reading.

Grammar.—M'Culloch's.

Geography.—Nicholl's.

History.—Chambers' History of the British Empire ; Wilson's Universal History ; Taylor's Manual of Ancient History.

Geometry.—Euclid, Books I—IV.

Algebra.—Quadratic Equations.

Writing.—Exercises and Translations.

Sanskrit.—Shabd Rupāvali ; Samas Chakra ; Pathāvali ; Bodh Vachan ; some Shlokas, or moral verses.

Persian.—Amadan ; Simple Sentences.

SIXTH CLASS, 1ST DIVISION.

English Reading.—M'Culloch's Course of Reading ; Grammar.

Geography.—General, of the Four Quarters ; particular, of Hindustan.

History.—Murray's British India, Chaps. i. and ii. ; Taylor's Ancient History, omitting Chap. v., Chap. ix. S. 5—8, Chap. xii. S. 6 and 7, Chaps. xiii. xiv. and xvi.

Mathematics.—Euclid, Six Books, with Exercises ; Young's Quadratic Equations ; the application of Logarithms to Interest and Annuities ; Plane Trigonometry : Young's, omitting Articles 27, 28, 31.

Physics.—Chambers' Matter and Motion.

Translation.—Written and Oral, into and from the Vernaculars.

Sanscrit.— } The same as in the 2nd Division.
Persian.— }

III.—COLLEGE.

FIRST YEAR CLASS.

English Literature.—Chambers' Cyclopædia : Selections from Cowper, Rogers, Coleridge, Macaulay.

Logic.—Easy Lessons on Reasoning : Analytical Introduction.

Locke's Conduct of the Understanding, Sects. 1—31.

History.—Heeren's Political System of Europe and its Colonies : Introduction ; Origin of Colonial Establishments, 1492—1515 ; Political View of the Reformation from 1517—1555 ; Colonial Affairs during the period.

Murray's India, Chaps. iii—v.

Geography.—Selections from E. Hughes' Atlas of Physical, Political, and Commercial Geography.

Political Economy.—Mill's Principles, Book I. Chaps. i—viii., Book III. Chaps. i—vi.

Selections from Senior.

Mathematics.—Young's Cubic and Biquadratic Equations ; Thomson's Spherical Trigonometry ; Mathematical Instruments.

Physics.—Orlebar's Course of Mathematics, Vol. I. : Mechanics, Reflection of Light from Plane Surfaces.

Chemistry.—Chemical Affinity ; Laws of Chemical Combinations and the Atomic Hypothesis ; Light ; Heat ; Magnetism ; Frictional, Voltaic, Magneto, Thermo, and Animal, Electricity ; all the Non-Metallic Elements, and certain of the Metals.

SECOND YEAR CLASS.

English Literature.—Chambers' Cyclopædia : Selections from Young, Thomson, Johnson, Collins, Gray, Campbell, Scott, Byron.

Mental Philosophy.—Locke's Essay ; Introduction, Book II. Chaps. i—xxi. (omitting Chap. i. Sects. 10—20 ; Chap. xiii. Sects. 10 to the end ; Chap. xv. ; Chap. xxi. Sects. 11—71).

Cousins' Psychology by Henry, Chaps. i—iv. ; Appendix, pp. 319—339.

History.—Heeren : Selections from 1661 to 1740 ; Macaulay's Essays : Sir William Temple, War of Succession in Spain, Lord Clive.

Geography.—Selections from Hughes' Atlas.

Political Economy.—Mill, Book III. Chaps. vii—xvii.

Hancock's Lecture (1848).

Mathematics.—Waud's Algebraic Geometry : Part I. Chaps. i—xi., the Cycloid, the Involute of the Circle ; Part II. Chaps. i. ii.

Exercises from Salmon's Conic Sections.

Physics.—Chambers' Hydrostatics and Pneumatics ; the Steam-Engine, and the Locomotive.

Chemistry.—The same as First Year Students.

THIRD YEAR CLASS.

English Literature.—Shakspeare : Othello.

Moral Philosophy.—Butler's Three Sermons on Human Nature ; Dissertation on the Nature of Virtue ; Introduction to the Analogy.

Stewart's Outlines, Part II. Chap. i., and Chap. ii. Sect. i. Arts. 1, 2.

Political Economy.—Mill, Book III. and Book V. Chaps. i. ii. ; Hancock's Lecture (1848) ; Smith's Wealth of Nations by McCulloch, Note ix. ; Hancock's Perfect Income Tax.

Induction.—Mill's Logic, Book III. Chaps. i—xviii. ; Book IV. Chaps. i—iii.

Selections from Whewell's Works.

Selections from Bacon's Novum Organum, Book I.

Mathematics.—Young's Differential Calculus, Sect. I. and Sect. II., Chaps. i. ii. ; Elements of the Integral Calculus.

Physics.—Hart's Mechanics, Chap. i. ; Hughes' Physical Geography, Chaps. i—ix.

Botany.—Structural and Physiological Botany ; Principles of Classification.

FOURTH YEAR CLASS.

In addition to the Studies of the Third Year Class,

Moral Philosophy.—Smith's Theory of Moral Sentiments, Part I. Sects. ii. iii. ; Part VII.

Physics.—Orlebar's Course of Mathematics, Vol. II. ; Optics, Dynamics, and Astronomy.

JOHN HARKNESS, A.M.,
Principal.

*Elphinstone Institution,
Bombay, 23rd November 1854.*

I.—BRANCH SCHOOLS.

1st.—FORT.

LANGUAGE AND GENERAL KNOWLEDGE.

Examiner, The Principal.

FIRST CLASS.

TEACHERS, { *English*, Sorabji Edalji.
 { *Gujarâti*, Chimanlal Nandalal.

Number of Pupils 33

Number present at Examination . . 29

Studies.

English.—M'Culloch's First Book, the whole.

Gujarâti.—Moral Class-Book, pp. 70 ; Outlines of Geography, Asia.

2. These boys commenced the alphabet five months ago. They have read less than usual, but most of them can read any part of the book, and translate the sentences into Gujarâti ; they also point out the different parts of speech ; writing just commenced.

3. There is considerable improvement in the Gujarâti reading, and more attention is paid to the sense ; parsing good. Their knowledge of geography is accurate, so far as it goes.

4.

SECOND CLASS.

TEACHERS, { *English*, Nasarvanji Naorozji.
 { *Gujarâti*, Chimanlal Nandalal.

Number of Pupils 38

Number present at Examination . . 36

Studies.

English.—M'Culloch's Second Book, the whole ; Third Book, pp. 28 ; Outlines of Grammar.

Gujarāti.—Moral Class-Book, pp. 125 ; Grammar ; Geography of Asia.

5. The reading is very good, and the parsing wonderfully correct, for the time ; the derivation of words understood ; some promising specimens of writing.

6. They read Gujarāti distinctly, but too loud ; parsing correct. They can point out the different countries of Asia, the principal mountains, rivers, and towns, but have never heard of some remarkable places in their own neighbourhood.

THIRD CLASS.

7.

2nd Division.

TEACHERS, { *English*, Kavazji Nasarvanji.
 { *Gujarāti*, Chimanlal Nandalal.

Number of Pupils 28

Number present at Examination ... 27

Studies.

English.—M'Culloch's Third Book, the whole ; Chambers' Moral Class-Book, pp. 30 ; Reid's Rudiments of Grammar, pp. 17 ; Reid's Rudiments of Modern Geography, Asia.

Gujarāti.—Memoir of Columbus, pp. 72 ; Writing from Dictation ; and Grammar.

Gujarāti and English.—Green's Phrases, pp. 4.

8. What has been gone over in class they read pretty fluently ; parts of speech distinguished, and rules of grammar, so far as they have learnt them, applied accurately by all, except a few boys near the bottom of the class. In geography they answer readily what they have learnt from the book, but, like the last class, are not sufficiently acquainted with places near home. Their knowledge of geography thus wants a proper basis.

9. In Gujarāti reading and parsing they acquitted themselves creditably.

10.

1st Division.

TEACHERS, { *English*, Edalji Nanabhai.
 { *Gujaráti*, Chimanlal Nandalal.

Number of Pupils..... 40

Number present at Examination 39

Studies.

English.—M'Culloch's Third Book, the whole ; Chambers' Moral Class-Book, pp. 65 ; Reid's Rudiments of Grammar, pp. 22 ; Reid's Geography, Asia and Europe.

Gujaráti.—Memoir of Columbus, the whole ; Writing from Dictation ; and Grammar.

Gujaráti and English.—Green's Phrases, pp. 17.

11. The answers of these boys display considerable intelligence, as well as careful teaching, but errors in pronunciation are frequent ; parsing very good ; geography creditable ; a few fair specimens of writing.

12. A few of them read Gujaráti very well, and almost all of them parse accurately, but far too quickly, and in a disagreeable monotonous tone.

2ND.—MUMBADEVI.

13.

FIRST CLASS.

Maráthi Division.

TEACHERS, { *English*, Govind Vishnu. .
 { *Maráthi*, Bhikaji Bhaskar.

Number of Pupils..... 24

Number present at Examination ... 21

Studies.

English.—M'Culloch's First Book, the whole ; M'Culloch's Second Book, pp. 40.

Maráthi.—Moral Class-Book, pp. 60 ; Outlines of Geography, Asia.

14. A few boys at the top read pretty well, and distinguish some of the parts of speech, but the majority are inferior in both respects to the Parsi class, which began after them.

15. • With a few exceptions, the Maráthi reading is slovenly, and little or no attention paid to the sense ; parsing fair ; geography meagre. It should be mentioned, however, that these few read Maráthi remarkably well.

SECOND CLASS.

16. *Maráthi Division.*

TEACHERS, { *English*, Gangadas Keshoddas.
 { *Maráthi*, Bhikaji Bhaskar.

Number of Pupils 20

Number present at Examination ... 19

Studies.

English.—M'Culloch's Third Book, pp. 67 ; Reid's Rudiments of English Grammar, pp. 12.

Maráthi.—Moral Class-Book, pp. 95 ; Outlines of Geography, Asia ; Writing from Dictation ; Grammar.

Maráthi and English.—School Dialogues, the whole.

17. Two of these boys are rather old (14, 15) for this class. They do not read so well as some of the others, but they seem to be intelligent, and very industrious ; parts of speech accurately distinguished ; one or two good specimens of writing ; appearance of the class upon the whole satisfactory.

18. The two senior boys are as much superior to the rest of the class in reading and parsing Maráthi as they are inferior in reading English. In geography the answering with few exceptions fair.

19. *Gujaráti Division.*

TEACHERS, { *English*, Maneksha Beramji.
 { *Gujaráti*, Bhikaji Bhaskar.

Number of Pupils 30

Number present at Examination .. 29

Studies.

English.—M'Culloch's Third Book, pp. 70 ; Reid's Rudiments of English Grammar, pp. 15.

Gujarāti.—Moral Class-Book, pp. 60 ; Grammar ; Writing from Dictation ; Outlines of Geography, Asia.

Gujarāti and English.—Exercises on the Tenses.

20. A few boys in this class have been longer at school than any of those in the last class, but the majority of them are of the same standing, and they have read nearly the same number of pages. Two or three in this class read better than any of the boys in the other, but there is a greater number of good readers and, I think, more intelligence in the Marátha class.

THIRD CLASS.

21. 2nd Gujarāti Division.

TEACHERS, { *English*, Framji Beramji.
 { *Gujarāti*, Bhikaji Bhaskar.

Number of Pupils. 29

Number present at Examination . . 29

Studies.

English.—Chambers' Moral Class-Book, pp. 40 ; Reid's Rudiments of Grammar, pp. 33 ; Reid's Geography, Asia.

Gujarāti.—Memoir of Columbus, pp. 50 ; Grammar ; Writing from Dictation.

Gujarāti and English.—Green's Phrases, pp. 20.

22. One boy in this class has already been four years in the English School ; a clever boy may pass the Clare Scholarship examination in less time. Reading tolerably accurate, but deficient in spirit ; parsing fair ; geography not properly understood.

23. Gujarāti reading fluent, but monotonous ; parsing rattled off at the highest pitch of their voice.

24. 1st Gujarāti Division.

TEACHERS, { *English*, Mancherji Mervanji.
 { *Gujarāti*, Bhikaji Bhaskar.

Number of Pupils. 29

Number present at Examination . . 29

Studies.

English.—Chambers' Moral Class-Book, pp. 53 ; Reid's Rudiments of Grammar, pp. 33 ; Reid's Geography, Asia and Europe.

Gujaráti.—Memoir of Columbus, pp. 60 ; Grammar ; Writing from Dictation.

Gujaráti and English.—Green's Phrases, pp. 30.

25. The articulation not sufficiently distinct ; parsing, upon the whole, fair. Better acquainted with the geography of Hindustan than some of the other classes, but their ideas of the relative bearing and distance of different places extremely confused.

26. Gujaráti reading and parsing characterized by the same faults as in the last class, but in a less degree.

GENERAL REMARKS.

27. In the Fort Branch School there is plenty of accommodation, and the rooms are well ventilated. Still the numbers remain stationary. Jamshedji Rustamji, who was Master of this School at the last examination, and who possessed great tact, as well as energy, unfortunately died during the vacation. Kavazji Nasarvanji, his successor, had previously had considerable experience in teaching, and since his appointment has devoted himself to the performance of his duties with zeal and success. It is to his credit that the School has not fallen off.

28. In the Mumbadevi Branch, though there are two classes fewer than there were last year, they still interfere with each other. In primary Schools, it is a great disadvantage if the pupils speak different languages. When this school was established, the site was chosen in a locality inhabited by Hindus of the poorer classes, and the fee was fixed at one-half of that paid in the Fort Branch, and in the Central School, in order that it might be specially adapted to their circumstances. But the number of Parsi pupils has from the first exceeded the num-

ber of Hindus, and at present the Gujaráti speaking boys, chiefly Parsis, are exactly double the number of Marátha boys.

29. This School and the Central Maráthi and Gujaráti Schools, now under one roof, might be amalgamated, with manifest advantage to both. These two buildings contain an aggregate of 457 pupils. In one of them, 325 Marátha and Gujaráti boys are taught to read and write their own language. They are also taught arithmetic, geography, and history, through the same medium. In the other, 132 Marátha and Gujaráti boys learn English reading, grammar, and arithmetic, each through the medium of his own language.

30. Now I would propose that the Marátha boys be collected in one School, and the Gujaráti boys in the other. In each School there would be, as now, two departments. But these, instead of being dependent upon the Vernacular language of the pupils, would be determined by their progress. It would still be optional with a boy to learn English, and it would still be necessary to pass an examination in the Vernacular, previous to admission into the English department,—the same as is now required for admission into the English School. But the course of study would be continuous, and progressive from the lowest to the highest class, and boys would be able to pass from one department into the other, instead of being separated, as now, by an impassable gulf. Masters and pupils would all speak one language, and this would allow a division of labour to be made upon sounder principles. A smaller number of Teachers would suffice. The whole would be under the management of an English-trained Master, and the English classes would be taught Vernacular reading and grammar by one of the Pandits or Mehetajis of the Vernacular Schools.

31. Instead of the distinction into *Vernacular Schools* and *English Branch Schools*, the designation of *Maráthi Primary* and *Gujaráti Primary* might be adopted.

II.—CENTRAL SCHOOL.

32. (1) LOWER SCHOOL.

LANGUAGE, GENERAL KNOWLEDGE, GEOGRAPHY AND HISTORY TAUGHT IN THE VERNACULARS ;

Examiner, the Principal.

SECOND CLASS.

Maráthi Division.

TEACHERS, { *English*, Bhairanath Mangesh.
 { *Maráthi*, Pañdurang Hari.

Number of Pupils in the Class 37

Number present at Examination ... 31

Studies.

English.—M'Culloch's Third Book, pp. 132 ; Reid's Rudiments of English Grammar, pp. 13.

Maráthi.—Moral Class-Book, pp. 150 ; Grammar ; Writing from Dictation.

Maráthi and English.—School Dialogues, the whole.

33. The reading of these boys is really good for the time ; translation and parsing very creditable ; the short sentences from the Dialogues given readily and correctly both in Maráthi and in English.

34. About half the class read Maráthi well ; the rest indifferently. Two Musalmans, who have learnt the Balbodh character since their admission into the English School, read with tolerable fluency. In parsing there is a good deal of hesitation, but this is far better than the unthinking rote style, which is still too common.

THIRD CLASS.

35. 2nd Maráthi Division.

TEACHERS, { *English*, Harichand Janardhan.
 { *Maráthi*, Nanabhai Hari Trimbak.

Number of Pupils in the Class 33

Number present at Examination 26

Studies.

English.—Chambers' Moral Class-Book, pp. 76 ; Reid's Rudiments of English Grammar, pp. 30 ; Reid's Geography, Europe and Asia.

Maráthi.—Introduction to the History of India, pp. 40 ; Grammar ; Writing from Dictation.

Maráthi and English.—Idiomatic Exercises, pp. 36.

36. Reading distinct, but the pronunciation not always correct ; parsing, upon the whole, satisfactory ; geography indifferent. The Idiomatic Exercises have been committed to memory, but the proper use of this book has not been understood.

37. Maráthi reading good ; parsing fair.

38. 1st Maráthi Division.

TEACHERS, { *English*, Raghunath Jagannath.
 { *Maráthi*, Bal Parasharam Shastri.

Number of Pupils in the Class 41

Number present at Examination 30

Studies.

English.—Chambers' Moral Class-Book, the whole ; Reid's Rudiments of Grammar, pp. 33 ; Reid's Geography, pp. 26.

Maráthi.—Introduction to the History of India, pp. 77 ; Grammar ; Writing from Dictation.

Maráthi and English.—Idiomatic Exercises, pp. 115.

39. Reading of the boys in the upper half of the class pretty good ; explanation and parsing fair ; answering in geography tolerably correct, but confined to the merest outline of the Four Quarters. A few promising specimens of writing.

40. Maráthi reading distinct and fluent ; construction and parsing very good.

41. *2nd Gujaráti Division.*

TEACHERS, { *English*, Ardeshir Framji.
 { *Gujaráti*, Ranchoddas Girdharlal.

Number of Pupils in the Class 42

Number present at Examination 41

Studies.

English.—Chambers' Moral Class-Book, pp. 97 ; Reid's Rudiments of English Grammar, pp. 32 ; Reid's Geography, pp. 22.

Gujaráti.—Memoir of Columbus, the whole.

Gujaráti and English.—Green's Phrases, pp. 20.

42. Reading distinct and clear ; pronunciation pretty good ; explanation and parsing correct ; answering in geography superior to that of the last class, though they had read somewhat less. Phrases readily and accurately given.

43. In the Vernacular class attention has been paid to facts as well as words, and most of the boys showed themselves well acquainted with the historical details, as given in the very interesting little class-book.

44. *1st Gujaráti Division.*

TEACHERS, { *English*, Pestanji Jahanghir.
 { *Gujaráti*, Ambaram Kevalram.

Number of Pupils in the Class 41

Number present at Examination 38

Studies.

English.—Chambers' Moral Class-Book, the whole ; Reid's Rudiments of Grammar, pp. 42 ; Reid's Geography, pp. 26.

Gujaráti.—Life of Columbus, the whole ; Grammar ; Writing from Dictation.

Gujaráti and English.—Green's Phrases, pp. 50.

45. These boys have an active and intelligent look, and their answers are in keeping with their appearance ; construction and parsing good.

46. Gujaráti reading and parsing pretty good, but the answering in history much inferior to that of the last class.

FOURTH CLASS.

47. *Maráthi Division.*

TEACHERS, { *English*, Babji Amritrao.
 { *Maráthi*, Bal Parasharam Shastri.

Number of Pupils in the Class 44

Number present at Examination 38

Studies.

English.—M'Culloch's Series of Lessons, pp. 135 ; M'Culloch's Grammar, pp. 140 ; Reid's Geography, Asia.

Maráthi.—History of British India : Chapters i—viii. ; Grammar ; Writing from Dictation.

Maráthi and English.—Idiomatic Exercises, pp. 145.

48. Pronunciation tolerably accurate in general, notwithstanding occasional mistakes ; construction and parsing indifferent ; answering in geography to questions from the text-book pretty accurate, but they have not connected historical events with the places of their occurrence ; the Idiomatic Exercises have been simply committed to memory. In the use of this book, a Teacher should put the sentence in different forms, altering the person, the gender, and the tense, so as to make sure that the construction in each case is understood. No good specimen of writing.

49. A few boys read Maráthi very well, and about half of them answer readily and accurately questions on the portion of history they have read in the class.

50. *4th Gujaráti Division.*

TEACHERS, { *English*, Kahandas Tapidas.
 { *Gujaráti*, Ranchoddas Girdharlal.

Number of Pupils in the Class 43

Number present at Examination 38

Studies.

English.—M'Culloch's Series of Lessons, pp. 40 ; M'Culloch's Grammar, pp. 26 ; Reid's Rudiments of Geography, pp. 28.

Gujarāti.—Life of Columbus, the whole.

Gujarāti and English.—Green's Phrases, pp. 54.

51. Kahandas, the Teacher of this class, is a very shrewd young man, and, since he joined the Institution, has distinguished himself by his diligence and application, particularly to mathematics, in which he was one of the best of his class. But the early part of his own education seems to have been very imperfect, and this renders him unfit to be a Teacher.

52. The appearance of the class was altogether unsatisfactory. The whole blame of this can hardly be imputed to Kahandas, who took charge of the class on the 8th October last. Up to that time it had been taught by Bamanji Pestanji, whose classes have uniformly made a good appearance. As Bamanji has taken a general superintendence of the School during the year, it is possible that the teaching of his own class has been intrusted to one of the scholars oftener than was desirable. I am unable otherwise to account for the failure. Kahandas has since resigned.

53. Even the Gujarāti reading was a good deal in the Native style of chanting, which has now almost entirely disappeared.

54. 3rd Gujarāti Division.

TEACHERS, { *English*, Edalji Nushirvanji.
 { *Geography*, Edalji Shapurji.
 { *Gujarāti*, Parbhuram Navalram.

Number of Pupils in the Class 39

Number present at Examination 39

Studies.

English.—M'Culloch's Series of Lessons, pp. 106 ; M'Culloch's Grammar, pp. 40 ; Reid's Geography, Asia, Europe.

Gujarāti.—Introduction to the History of India, the whole ; Parsing ; Writing from Dictation.

Gujarāti and English.—Green's Phrases, pp. 50.

55. Articulation indistinct ; explanations wordy and vague ; parsing and etymology good ; answering in geography really very creditable ; phrases not quite so good ; no good specimen of writing.

56. Gujaráti reading fluent, but in a harsh monotonous voice ; construction and parsing satisfactory.

57. *2nd Gujaráti Division.*

TEACHERS, { *English*, Kavazji Shapurji.
 { *Gujaráti*, Parbhuram Navalram.

Number of Pupils in the Class 39

Number present at Examination 38

Studies.

English.—M'Culloch's Series of Lessons, pp. 122 ; M'Culloch's Grammar, pp. 40 ; Reid's Geography, Asia, Europe.

Gujaráti.—Introduction to the History of India, the whole ; Parsing ; Writing from Dictation.

Gujaráti and English.—Green's Phrases, pp. 40.

58. Reading of the majority of the class pretty good ; etymology and parsing very good ; knowledge of geography accurate and minute ; phrases readily and correctly rendered.

59. Gujaráti reading somewhat sermonic ; parsing satisfactory.

60. *1st Gujaráti Division.*

TEACHERS, { *English*, Khurshedji Manekji.
 { *Gujaráti*, Mansukharam Narsidas.

Number of Pupils in the Class 42

Number present at Examination 39

Studies.

English.—M'Culloch's Series of Lessons, pp. 127 ; M'Culloch's Grammar, pp. 1—85, and Rules of Syntax, pp. 130—150 ; Reid's Geography, pp. 28.

Gujaráti.—Introduction to the History of India, the whole ; Parsing ; Writing from Dictation.

Gujaráti and English.—Green's Phrases, pp. 60.

61. Pronunciation not free from faults ; explanation and parsing, upon the whole, satisfactory ; geography creditable ; phrases correctly rendered, both into and from the Vernacular.

62. Gujaráti reading better, but rather quick ; answer ques-

Number of Pupils in the Class. 38 c

Number present at Examination. 34

Studies.

English.—M'Culloch's Course of Reading : the Poetical Pieces ; Nicholl's Geography, Asia ; M'Culloch's Grammar, the whole ; Wilson's Universal History, pp. 103 ; Chambers' History of the British Empire, pp. 145 ; Written Exercises ; Writing from Dictation.

Gujarāti.—Introduction to the History of British India, pp. 102 ; Grammar ; Writing from Dictation.

68. Reading of the majority good, but greater inequality than was expected in this class ; the lessons seem to have been thoroughly understood ; allusions satisfactorily explained ; some of the exercise-books neatly kept.

69. Gujarāti reading and parsing fair ; history not quite so good. Too many histories have been studied simultaneously ; this has confused the boys.

70.

Maráthi Division.

TEACHERS, { *English*, Harishankar Balkrishna.
History and Geography, Mahadaji Vasudeva.
Maráthi, Keshava Sakharam Shastri.

Number of Pupils in the Class 32

Number present at Examination 24

Studies.

English.—M'Culloch's Course of Reading : Prose, Miscellaneous Pieces, the Poetry as far as page 153 ; M'Culloch's Grammar ; Nicholl's Geography : Asia, India, pp. 58 ; Wilson's Universal History, pp. 81 ; Written Exercises.

Maráthi.—Mémorial of Columbus ; History of British India, Chaps. i—xii. ; Writing from Dictation ; Grammar.

71. Pronunciation somewhat indistinct ; that of only one or two good ; explanations rather vague, and without confidence, even when they are right ; parsing, upon the whole, good.

72. They read Maráthi fluently, and as if they understood

it,—which is not always the case ; there was no time to examine this class in the history they had read in the Vernacular ; explanation and parsing of the language fair.

SIXTH CLASS.

73.

2nd Division.

TEACHERS, { *English*, Jahanghir Barjodji.
 { *Gujarāṭi*, Somnarayan Nandnarayan.
 { *Marāṭhi*, Keshava Sakharam Shastri.

Number of Pupils in the Class 39

Number present at Examination 35

Studies.

English.—M'Culloch's Course of Reading, Sects. i—v. ; M'Culloch's Grammar : Syntax ; Taylor's Manual of Ancient History : Greece, and the Kingdoms that arose out of the Macedonian Empire ; Chambers' British Empire, pp. 165 ; Wilson's Universal History : Modern Europe ; Nicholl's Geography : Africa, America, use of the Terrestrial Globe ; Written Exercises.

Vernacular.—Translation from M'Culloch's Course of Reading.

74. Pronunciation, upon the whole, pretty accurate, with a number of mistakes, however ; they seem to experience more difficulty in giving their explanations in English than some of the lower classes. I am unable to say whether the latter give them from memory only, while in the other case judgment is used ; but this occurs to me as a plausible explanation of the fact.

75. A few of the exercise-books very neatly kept, but the translations do not seem to have been corrected with sufficient care.

76.

1st Division (Candidate Class).

From the 2nd January to September the 12th, this class was taught by Mr. Draper. During the remainder of the month, while Mr. Draper was absent on leave, it was taught by Kai-khosru Hormazji, and on Mr. Draper being appointed Professor

of English Literature in the Poona College, in the beginning of October, it was given in charge to Mr. Bamanji Pestanji.

77. The number of pupils in the class was 38. One of these did not compete, and two who did not belong to the class offered themselves for examination. The total number of candidates was thus 39.

78. The result of the examination is creditable. In my letter to the Board of Education No. 21 of 1855, dated the 24th February, paragraph 5, it is stated :—" It appears that *seven* (7) have obtained the marks requisite to qualify for *Stipendiary Scholarships*, *twelve* (12) for *Free Scholarships*, and *thirteen* (13) to entitle them to attend as *Free Students* ; making a total of thirty-two (32), out of thirty-nine (39), who have obtained upwards of 40 per cent. marks."

PERSIAN CLASSES.

Examiners, { Vinayaka Vasudeva,
Dosabhai Sorabji Munshi, } Esquires.
Dadabhai Naorojji,

79. Class I.

TEACHER, Mirza Mahamad.

Number of Pupils in the Class 22

Number present at Examination..... 18*

Studies.

Amadan (Conjugation of Verbs) ; Simple Sentences ; Hikayat, 10 stories.

80. In reading, they *intone* in short periods ; pronunciation not good ; parsing of four boys tolerably good, that of the rest very indifferent.

81. Class II.

Number of Pupils in the Class..... 25

Number present at Examination.... 20

Studies the same as in the last class.

82. Five or six boys at the top read as well as the other class,

if not better. They also translate into Gujaráti, and parse equally well. The rest of the class have made very little progress indeed. It appears that all those who have acquitted themselves well have had the advantage of domestic tuition.

83.

SANSKRIT CLASS.

Examiners, { Vinayaka Vasudeva, Esq.
Krishna Shastri.

TEACHER, Keshava Sakharam Shastri.

Number of Pupils in the Class. . . . 27

Number present at Examination . . 18

Studies.

Shabd Rupávali, Samas-Chakra, Pathávali, Bodhavachan, some Shlokas.

84. About half a dozen boys at the top read and parse much better than the rest. The progress upon the whole seems to be fair for the time. The knowledge they have acquired of Sanscrit roots will no doubt be of great use to them.

GENERAL REMARKS.

85. The progress in the Sanscrit classes has not answered expectation, and in the Persian classes has been even less satisfactory.

86. The cause of this is want of a sufficient motive for learning these languages. Prizes, indeed, have been given, and they appear to have stirred up a little emulation in the Sanscrit classes, but in the Persian classes they have done no good whatever. In some Parsi families it is usual to teach the sons Persian; and in every class there will generally be found one or two boys who have made considerable progress in the language under this system of domestic tuition. The other boys fancy that they have but little chance of overtaking those who are already so far in advance of them, and consequently decline a contest which they foresee must be arduous, and the result of which appears doubtful.

87. Had a knowledge of these languages been still required of candidates for the higher Scholarships, the opportunity now afforded for studying them would have been eagerly embraced. Indeed, before the appointment of a Persian Teacher was sanctioned by the Board, it was not uncommon for young men to engage a private Munshi for the purpose. That such instruction was valued, is proved by their being willing to pay for it. It was not sought as an end, however, but as a means of obtaining one of the higher Scholarships ; and when no longer required for that purpose, it ceased to be an object of desire.

88. The boys, for whose benefit these classes were instituted, are looking forward to, and preparing for, the Clare Scholarship Examination. The standard of qualification for these Scholarships has of late been considerably raised, and the requisite branches of study cannot be acquired without industry even by a boy of good abilities. In these circumstances, it is only natural that the study of a language not included in the subjects of examination should be postponed.

89. I would not, however, recommend that the teaching of Sanscrit and Persian in the Institution be discontinued, because I am of opinion—

1st.—That no scheme of a liberal education in this country can justly be reckoned complete, from which these are excluded.

2nd.—That it appears probable, when the Scholarship regulations come to be revised, that some knowledge of them may be again required, at least of candidates for the higher grades.

HISTORY AND GEOGRAPHY.

Examiner, Professor SINCLAIR.

FIFTH CLASS.

90. *2nd Gujaráti Division.*

This class passed a very creditable examination in history. In my examination, more particularly in Chambers' British History, I endeavoured to select such a class of questions as would lead the pupils to the more important matters to which

the attention should be directed in the study of history ; and, as occasion permitted, I illustrated the greater historic importance of some kinds of events over those of others. The class's general answering evinced that they had been under careful instruction.

91. The examination in the important subject of geography, I was enabled, owing to the zeal of the Teacher in that department, Mr. Kaikushrao Hormusjee, and to his judicious selection of information from various quarters for his pupils, to propose of a higher order, and of a more varied character, than I could have expected for so junior a class. Thus Kaikushrao had imparted to them some information derived from Hughes's Physical Atlas—a book which had been only introduced into the College department during the last year. Also the class's answering manifested a very creditable familiarity with the Language Divisions of India, culled from Sir Erskine Perry's Memoir ; and with the Regulation Districts, and the British territories under each Presidency, compiled from Campbell's Modern India and its Government. The class was also examined on the topography of India, and the tracing of the river-courses, &c., both without the aid of the map, and on it.

92. I shall here take the liberty of recommending, in the strongest manner, that the elements of physical and commercial geography be formally introduced as a regular branch of education into all, at least the Upper Schools, as being one of the most interesting and improving disciplines for the mind, and as conveying the most useful and important information. The desideratum of large physical maps, adapted for School instruction, is not, I believe, supplied even in England yet. However, it would not be difficult or expensive to construct maps suitable for the uses of the Institution, if such a proposal would meet with the Board's sanction.

93. I have here, once for all, to express my regret that I had not introduced into this year's examination of the lower divisions of the Upper School—in addition to my oral examination—a few paper questions, the answering of which would have necessitated the use of the pen. "Writing makes an accurate man" ; and I

know of no measure so likely to effectually check and correct the imperfect spelling and other inaccuracies which deform the compositions even of some of our cleverest and best informed College students, as to show that an importance is attached to that accomplishment at the examinations from a very early period of their discipline. It would cause an increased degree of attention to be paid by the pupils to this part of their School exercises. However, by reference to paragraph 151, I trust the Board will feel assured, that by attempting to examine such an addition of written questions, I would have undertaken a labour which, by my greatest exertions, could not possibly have been completed, without cutting too far into the time of the ensuing year. The importance, however, of early acquiring habits of right spelling, punctuation, and correct composition, is so great, that I trust next year, by the aid of the Masters, or some such assistance, to add this indispensable complement to the *vivá voce* examinations of the Schools ; and the more so, as the mode of instruction adopted by the Teachers throughout the year is very much fashioned (as it should be) to meet the requirements of the periodical examinations.

94. *1st Gujaráti Division.*

The answering of this class in history reflects the greatest credit on its Teachers, Mr. Hormazji Edalji, Assistant Master, and Mahipatram Rupram, a West Scholar, and the Gujaráti Gaikwar Scholar of the year. The mode of examination I adopted was the same as that stated in paragraph 90, in reference to the 2nd Gujaráti Division.

95. I shall not take the liberty of reiterating suggestions similar to those already thrown out in paragraphs 92 and 93 ; but I may observe that they apply with equal force to this class, and to the two next classes which shall come under review.

96. *Maráthi Division.*

This class was examined in about 80 pages of Wilson's Universal History. Such a brief summary of events is too trying

on the memory of the pupils, and probably does not afford so good an exercise to the various faculties of the mind, or convey as much really profitable historic information, as a more diffuse and easy text-book would. However, the answering of the class evinced a good deal of industry on the part of the Teachers.

97. The class also answered very respectably in the topography and river-courses, mountain ranges, &c., of India.

SIXTH CLASS.

98.

2nd Division.

The subjects in history which were prepared by this class were rather extensive, being taken from Dr. Taylor's Manual of Ancient History, Wilson's Universal History, and Chambers' British Empire; and the general answering was creditable to the zeal of the Master. As the Candidate Class of the ensuing year was to be formed in a great measure of the pupils of this class, I endeavoured as much as possible to direct the attention of the class to a discrimination of the more important parts of a narrative, and to the tracing, as much as possible, of historic events to their causes, whether as seated in human nature, or as depending on the external world.

99.

1st Division (Candidate Class).

The general marks in history and geography of the Candidate Class will afford much gratification, as exhibiting the results of a good deal of diligence and industry in making up the matter of their authors. But it is proper here to draw particular attention to the fact, that most of the marks would have been still much higher, if more attention had been devoted to the subjects of orthography and handwriting, the former of which, at least, is considered indispensable in a liberal English education. With the honorable exception of Jamshedji Nasarwanji (marks = 94 per cent.), whose name I beg thus to signalise as having misspelled no English word, and only one Greek word, the spelling of the class in many of the most common words, and their acquaintance with some of the most ordinary English idioms, and particularly with the use of the articles "the" and "a," or

"an," is very imperfect ; and I have thought it expedient for the future welfare of the lads, and more especially for that of their successors, to make the consideration of these matters an *element* in my judging the quality of the answering of the class, which is *at the threshold of the College*, to a still greater degree than I have done in the College classes. Another year in the Candidate Class, where more time can be devoted to such matters, would be far more beneficial to several of the students, than *entering the College prematurely* ; for in the College, there is from the first year to the last such a quantity and variety of matter in the various sciences to be attended to, that those who have entered it with an imperfect knowledge of orthography, punctuation, and idiom, rarely ever succeed, notwithstanding their own and their Professors' most zealous endeavours, in eradicating these bad habits, and supplying the accomplishments of correct spelling and elegant diction.

From the preceding element of my judgment, taken in connection with their generally very respectable marks, it will be seen that the class's knowledge of the subject of history in particular, and of geography, is highly creditable to their Teachers, Mr. (now Professor) Draper, and Mr. Bamanji Pestanji.

100. I have drawn up at some pains, and I beg to forward to the Board, a sheet, which affords a complete view of the marks awarded to every student for his answering in each question, of the number of defects in idiom or diction, of the quality of his penmanship, and general style, of his punctuation, and of most of the instances of bad spelling which occur throughout his written answers. The very great labour which such a registration necessarily entailed, I expect will be amply repaid by the increased attention to these matters, which so minute an examination and record of them, and the weight I have attached to them, are calculated to insure, directly in the Candidate Class, and remotely throughout the whole School department.

101. Geography of a much higher order, and a better text-book, than those at present existing in the Schools, should certainly be introduced in the Candidate Class. The study of the physical features of our planet, and of some of the most important

facts of commercial geography, would be a very valuable accession, as well to their general mental discipline, as to their knowledge. The already taught branch of political geography would also be much improved, by having some of the simpler methods of map projections taught in connection with it. Without the student practically applying his own hand to the work, he will never feel the due importance which should be attached to the meridian lines, and parallels of latitude, in the study of geography.

102. The elements of political economy, when invested with the interest which naturally attaches to the discussion of the subject of wealth, may be rendered as attractive as a knowledge of them is confessedly beneficial. No more simple nor more scientific introduction to the science than Archbishop Whately's "Money Matters" can be recommended.

R. S. SINCLAIR.

ARITHMETIC AND MATHEMATICS.

Examiner, Professor DADABHAI NAOROJI.

103. As the accompanying tables have been drawn up in the same manner as last year, a repetition of explanation is unnecessary. I must not, however, omit to mention, that all the Masters have endeavoured to carry out the suggestions made by me at the periodical examinations, though not with equal success.

104. The Candidate Class was taught by Mr. Draper till 12th October, and by Mr. Bamanji Pestanji during the remaining part of the year. The studies of the class are given in the programme, and the result of the examination in Appendix C a. Though four out of seven paper questions were new to the boys, it will be seen, on referring to the tables, that five have obtained marks much above 60 per cent., and twenty have received 40 and upwards. The class has therefore passed a creditable examination in mathematics.

105. There were two other competitors for Clare Scholar-

ships besides the pupils of the Candidate Class ; viz. Rustomji Hirjibhai, from 6th class 2nd Division, and Sorabji Jahanghir, lately a student in the Grant Medical College. The result of their examination is included in Table (e).

106. The following are the tables referred to, viz :—

- | | |
|-----|---|
| (a) | Report of the Classes in the Mumbadevi Branch School. |
| (b) | „ „ „ Fort Branch School. |
| (c) | „ „ „ Lower Central School. |
| (d) | „ „ „ Upper Central School. |

DADABHAI NAOROJI.

(a) MUMBADEVI BRANCH SCHOOL.

Arithmetic.

Class.	Division.	Teacher.	Studies.	Average Time at School.	Time under present Master.	No. of Pupils in Class.	No. present at Annual Examination.	Passed well.	Passed fairly.	Remarks.
				Months.	Months.					
I.	Maráthi.	Govind Vishnu	Simple Division ..	5	13 $\frac{1}{2}$	23	20	36	10	This class was admitted in October. Progress fair. Till July, Govind taught II. Class, Maráthi Division Central School. Examined on 18th February in reduction. Studies, addition of vulgar fractions. Out of 25 present, only 4 did not work on the slate any of the questions proposed. Progress fair.
II.	Maráthi.	Gangadas Keshoddas..	Vulgar Fractions : Subtraction.	11	5	21	20	3	0	Examined ritú voce on 16th October. Only 4 boys gave pretty intelligent answers. Progress during the five months pretty good. Gangadas seems to have laboured hard, but not with sufficient skill. During the first six months of the year, this class was taught by Nanabhai Bhaakar. Examined ritú voce on 24th March; about a fourth of the class answered well, and only 5 failed entirely. Before July, Gangadas taught I. Class Maráthi Division, which was examined in vulgar fractions on 25th March. Out of 27 present, 6 worked questions in mental arithmetic well, and 5 pretty well.

Class. Division.	Teacher.	Studies.	Average Time at School.	Time under present Master.	No. of Pupils in Class.	No. present at Annual Examination.	Passed well.	Passed fairly.	Remarks.
II. 3rd Guj.	Maneksha Beramji. ...	Vulgar Fractions : Addition.	15	11	33	33	8	16	First examination on 20th March. Studies, simple rules; two-fifths of the class answered well mentally, and the rest pretty well. Second examination on 18th September. Studies, reduction of fractions; one-fifth of the class explained the processes intelligently. Progress during the year very good.
" 2nd Guj.	Framji Beramji	Vulgar Fractions...	18	11	29	29	7	12	First examination on 22nd March; Studies, addition of vulgar fractions. Out of 19 present, 9 answered well; the rest failed. Second examination on 18th September. Studies, vulgar fractions, division. Out of 22 present, 10 answered intelligently. Progress during the eleven months very good.
" 1st Guj.	Mancherji Mervanji....	Fractions, Vulgar and Decimal.	23	9	26	26	5	12	This class was taught, by Cawasji Shapurji till 1st March. First examination on 23rd March. Studies, vulgar fractions. 19 boys worked mentally, well, and 8 pretty well; 3 only failed entirely. Second examination on 11th September. Studies, decimal fractions. Out of 24 present, 5 answered satisfactorily. Progress creditable.

(b) FORT BRANCH SCHOOL.

Arithmetic.

Class.	Division.	Teacher.	Studies.	Average Time at School.		Time under present Master.		No. of Pupils in Class.	No. present at Annual Examination.	Passed well.	Passed fairly.	Remarks.
				Months.	Months.							
I.	..	Sorabji Edalji.....	Simple Multiplication.	2	2	.	.	38	35	4	27	Progress creditable. Sorabji taught till October, II. Class 1st Division. First examination on 3rd March. Studies, multiplication of vulgar fractions. Out of 30 present, 5 answered well, and 9 pretty well. Second examination on 21st June, in reduction. Almost all the boys repeated the tables, and 5 performed reduction well mentally. Third examination on 21st August. Studies, addition of decimal fractions: 12 boys out of 28 present, answered well. Progress fair
II.	3rd	Nasarwanji Naorozji..	Vulgar Fractions: Reduction.	11	2			38	36	0	24	Progress creditable. Till July, Nasarwanji taught III. Class 2nd Div. Division, in the Central School. It was examined on 28th March. Studies, vulgar fractions and proportion. Out of 34 present, 22 answered simple questions mentally. Progress good. From 5th July to 5th October, he taught I. Class, 2nd Division. Studies, subtraction. Out of 31 present, 16 worked simple questions in mental arithmetic.

Class.	Division.	Teacher.	Studies.	Average Time at School.	Time under present Master.	No. of Pupils in Class.	No present at Annual Examination.	Passed well.	Passed fairly.	Remarks.
				Months.	Months.					
II.	2nd	Cawasji Nasarwanji ..	Vulgar Fractions : Multiplication.	18	2	32	31	6	20	Progress creditable. Till 5th October, Cawasji taught I. Class, which was examined, first on 27th February. The higher boys added well mentally; about one-third of the 34 present could add mentally only small numbers. Second examination on 16th June. Out of 34 present, 5 multiplied well mentally; 10 could multiply only small numbers. Third examination on 11th August. Out of 32 present, 5 answered well. Progress fair.
"	1st	Edalji Nanabbhai.	Decimal Fractions : Multiplication.	23	2	31	30	9	6	Progress very good. Till 5th October, Edalji taught 2nd Division, which was first examined on 2nd March, in addition of vulgar fractions. Out of 33 present, 4 added well mentally, and 10 pretty well. Second examination, in subtraction of vulgar fractions, on 20th June. 5 answered well, and 5 pretty well, but none could explain the rules. Third examination on 2nd August. The boys did not make much progress in understanding the rules. Progress pretty good.

(c) LOWER CENTRAL SCHOOL.

Arithmetic.

Class.	Division.	Teacher.	Studies.	Average Time at School.	Time under present Muster.	No. of Pupils in Class.	No. present at Annual Examination.	Passed well.	Passed fairly.	Remarks.
				Years.	Months.					
II.	Maráthi.	Bhairanath Mangesh.	Decimal Fractions.	1½	1½	45	37	4	12	Govind Vishnu taught this class till 10th October. Examined on 16th September, in vulgar fractions. Only 2 boys answered intelligently, and 1 more tolerably. Progress fair.
III.	2nd Mar.	Harichand Janardan	Simple Proportion.	2	5*	31	25	5	7	Harichand taught till July the corresponding class. Examined 28th February. Studies, subtraction of decimal fractions. Out of 26 present, 7 answered well, and 5 pretty well. Progress fair.
"	1st Mar.	Raghunath Jagannath.	Simple and Compound Proportion.	2½	5	39	30	6	12	Examined 19th September. Studies, reduction of decimal fractions. Only 9 out of 22 present answered intelligently. Progress fair.
"										Examined 30th September. Studies, decimal fractions. Out of 31 present, 3 answered intelligently, 3 pretty well. Progress fair. Raghunath took charge in April of the corresponding class, which was taught by Dinkar Ramchandra during the first four months. Examined 7th March. Studies, addition of decimal fractions. Out of 23 present, 3 worked mentally well, and 5 pretty well; 6 more answered one or two very simple questions each. Progress fair.

Class.	Division.	Teacher.	Studies.	Average Time at School.	Time under present Master.	No. of Pupils in Class.	No. present at Annual Examination.	Passed well.	Passed fairly.	Remarks.
				Years.	Months.					
III.	2nd Guj.	Ardesbir Framji.....	Compound Rules.	2½	2½	45	42	317		This class had no fixed Teacher from July to 16th September, when Ardesbir took charge of it. Examined 14th October. Studies, compound multiplication. Out of 40 present, about half the number knew reduction well, but required more exercise in repeating the tables. Progress fair.
"	1st Guj.	Pestanjji Jahanghir.....	Simple Proportion.	2½	5	40	38	113		Examined 24th October, in compound rules. Out of 34 present, 6 answered intelligently, and 6 more made good attempts. Progress fair. Pestanjji taught, till July, II. Class, 1st Guj. Division. Examined on 18th March, in division of vulgar fractions. Out of 45 present, half the number worked mentally very well; 5 more tolerably. Progress good.
IV.	Maráthi.	Babji Amritrao..	Practice, Interest, Involution, and Evolution.	3½	5	40	33	917		Examined on 7th October, in decimal fractions. Out of 28 present, 1 explained the rules very well, and only 3 more made good attempts. Progress good. Till July Babji taught the corresponding class. Examined on 11th March, in addition and subtraction of decimal fractions. Out of 22 present, 7 worked mentally very well, and only 2 failed entirely. Progress creditable.

"	4th Guj. Kahandas Tapidas.....	Compound Pro- portion, Practice commenced.	3	01	38	29	8	3	This class was taught by Bamanji Pestanji till 12th October. Examined on 25th October, in simple proportion. Out of 32 present, 1 answered very intelligently, and 5 more well. Progress pretty good. Till July Bamanji taught III. Class, 3rd Guj. Division, which was examined on 25th March, in reduction of decimal fractions. Out of 38 present, 6 answered well, and 12 pretty well. Progress pretty good.
"	3rd Guj. Edalji Nasarvanji . . .	Practice : 9 Rules.	3½	5	40	37	7, 16	Examined 31st October, in proportion. 10 boys, out of 35 present, answered intelligently. Till July, Edalji taught IV. Class, 1st Guj. Division. Examined on the 18th April, in decimal fractions. Out of 39 present, 1 answered very well, 7 well, and 14 indifferently. Progress pretty good.	
"	2nd Guj. Cawasji Shapurji . . .	Practice.....	4	5	39	37	8, 17	Examined on 4th November, in proportion. Out of 38 present, 13 answered well. Progress very good. From March till July, Cawasji taught III. Class, 2nd Guj. Division. Examined 8th April. Only 3 out of 32 present failed entirely, 11 an- swered well, and the rest pretty well. Progress creditable.	
"	1st Guj. Khurshedji Manekji ..	Interest, Involun- tion, and Evolu- tion.	4½	5	44	41	7, 19	Till July, Khurshedji taught IV. Class, 2nd Guj. Division. Examined 11th April, in vulgar frac- tions. Out of 31 present, about 12 boys worked a few questions each mentally. Progress fair.	

(d) UPPER CENTRAL SCHOOL.

Mathematics.

Class.	Division.	Teacher.	Studies.	Average Time at School.	Time under present Master.	No. of Pupils in Class.	No. present at Annual Examination.	Algebra.	Geometry.	Remarks.
				Years.	Months.			Passed well.	Passed fairly.	
V.	Maráthi.	Harishankar Bal-krishna.	Algebra : Simple Equations of one unknown quantity ; Geometry : Books I. & II., & Book III. Props. 1—15.	4½	11	31	24	5	8	3
								Passed well.	Passed fairly.	Examined in algebra on 1st, 12th, and 15th August. Out of 34 present, 7 explained the rules well, and 18 did not answer at all. Examined in geometry on 19th August. Out of 32 present, 5 answered twice, and 11 once. Progress fair.
"	2nd Guj.	Kaikhosru Hormazji.	Algebra : Division. Geometry: Book I., Props. 1—45.	4½	11	39	38	4	9	5
										Examined in algebra on 22nd April. Out of 41 present, 7 answered very well, 6 well, but 10 failed entirely. Examined in geometry on 17th, 20th, and 27th June. Out of 39 present, 6 answered very well, and about 14 more fairly. Progress fair.
"	1st Guj.	Hormazji Edalji....	Algebra : Simple Equations of three unknown quantities ; Geometry : Books I.—III.	4½	11	37	35	4	19	6
										At the Annual Examination, only one proposition was proposed on slate, which was solved by 6. The catalogue on which notes were taken of the result of the examination made in July is lost. Progress good in algebra, pretty good in geometry.
VI.	Mixed.	Jahanghir Barjodji..	Algebra : Quadratic Equations ; Geometry: Books I—IV.	5	11	34	31	1	22	8
										Examined in algebra on 22nd, 20th, and 29th August. Out of 30 present, 3 passed well, and 6 more fairly. Progress fair. Examined in geometry on the 2nd, 5th, and 9th September. Out of 27 present, 10 answered well. Progress good.

III.—COLLEGE.

1. LITERATURE, LOGIC, MENTAL AND MORAL PHILOSOPHY.

FIRST YEAR CLASS—35 *Students*.

107. *English Literature*.—Chambers' Cyclopædia of English Literature has been the text-book. The passages read in class have been chiefly selections from the poets. The students had previously read comparatively little poetry, so that, in addition to its other attractions, it came to them, in some measure, invested with the charm of novelty. The form of construction, too, is more varied than in prose ; the pronunciation is sooner caught, and more readily recalled, by the aid of rhyme ; and nice distinctions in meaning, of words nearly synonymous, are more easily apprehended, when embodied in the poetical form.

108. Great attention has been paid to this branch of study, not only on account of its own intrinsic importance, but also of the relation which it bears to every other that is taught in the Institution. This has been appropriately illustrated, by the lessons from Whately and Locke, at a different hour. By showing the utility of language as an instrument of thought, as well as a means of communicating it, they have served to recommend and inculcate the study of literature ; though perhaps no stronger inducement could be offered than the fact that it is through their knowledge of English that most of the students expect, in one way or other, to earn a livelihood.

109. *Logic*.—Pure logic, particularly in its first stages, is generally rather repulsive to young students. To many of this class, if I mistake not, it was not so. All appeared willing, and several have proved very apt, learners. Most of them are able to apply the common rules with readiness ; to analyse a syllogism, and to refer a fallacy to its proper head.

110. *Locke*.—No young man can study Locke's *Conduct of the Understanding* without benefit. Unless the Teacher be

particularly on his guard, a boy is apt to acquire at School the habit of regarding a knowledge of objective facts as the end to be attained. This admirable little treatise at once introduces him to another field, which invites and demands cultivation. The difficulty of getting rid of prejudice and preconceived notions is felt. This naturally begets caution in forming opinions, and is calculated to induce respect for variety in the opinions of others.

111. The general character of the answering, both to the *vivâ voce* and paper questions will be seen from the marks as given in Appendix C b. From the selected answers (Appendix E) their knowledge of English and of Logic may be at once inferred. The class contains some youths of considerable promise, and it will be observed from Dr. Giraud's Report (Art. 165) that he considers it exhibits a marked superiority over the corresponding class of the preceding year.

SECOND YEAR CLASS—26 Students.

112. *English Literature*.—Selections from Young, Thomson, Johnson, Collins, Gray, Campbell, Scott, and Byron, have been read in class. The etymology and meaning of words have been examined; allusions, historical and mythological, explained; and peculiarities of construction noticed. The reading of many of the students is tolerably good, as far as regards fluency and accuracy of pronounciation. The chief defect,—and it is one which will not be easily remedied,—is want of feeling. At least, feeling is not expressed by the modulation of the voice.

113. *Mental Philosophy*.—The end proposed, in the teaching of this class, has been the cultivation and development of the faculties of the mind. The text-book, as formerly, has been Locke's Essay. This was divided into portions corresponding with the divisions under which the subject is treated by Cousin in his Lectures. Locke's views, being those which probably present themselves most naturally to the mind of every one who has not deeply reflected on the subject, are studied first; and, I need hardly say, are generally accepted. Cousin's analysis then follows; and, on those points in which he differs from Locke, his refutation seldom fails to carry conviction to the

minds of the students. Occasionally, however, a doubt is thrown upon the soundness of his criticism. Mental activity is thus encouraged; while, at the same time, they are taught to avoid dogmatism and hasty conclusions.

114. The result of the examination is encouraging. In the written answers there is considerable freedom of style, and there are some indications of an attempt at independent thinking. In the selected answers, considerable variety will be found. One paper is given entire, in the original, as written at the examination table, in order to show the quantity as well as the quality of the answers returned.

THIRD YEAR CLASS—13 *Students*.

115. *English Literature*.—Three hours a week have been devoted to this subject. “Othello” has been read, and most of the students have evidently felt much interest in it. The explanations have related to the *substance* as well as the *language*; and the theory of the emotions has been elucidated by the admirable manner in which they are here represented in their actual working.

116. The extent of their command over the English language, and of their appreciation of the characters of the principal actors, may be collected from the selected answers (Appendix E) much better than from any general expressions.

117. *Moral Philosophy*—11 *Students*.—It will be seen from the programme (p. 8), that portions of the works of Butler and Stewart have been used as the text-book on this subject. These have been amplified, and illustrated by copious references to Sir W. Hamilton’s Notes on Reid, and to the works of Brown and other authors.

118. The written answers evince attention and memory; and the style is simple, and generally pretty correct. It appears from Appendix C, Table *d*, that five out of the eleven students who composed the class obtained upwards of 60 per cent. of the estimated value of the full answers.

119. The two remaining Fourth Year Students were examined along with them, but the highest of these gets only 55 per cent.

FOURTH YEAR CLASS—2 *Students*.

120. At the beginning of the year, this class consisted of nine students. One of those who presented themselves for examination had been appointed to a situation two months before, so that the class may be said to have been broken up. Of late years this has uniformly been the case,—which is the more to be regretted, because in the fourth year a student would probably learn twice as much as during any previous year of the course. How this is to be remedied is a subject well worth consideration.

121. Stewart's Outlines, Butler's Analogy, Part. I., Butler's three Sermons on Human Nature, and Dissertation on Virtue, had been previously studied in the Third Year Class; and, before the examination, Smith's Theory of Moral Sentiments, Part I., Sects. ii. iii., and Part VII. containing his View of the different Systems of Moral Philosophy, had been read.

122. The examination paper was kindly proposed by Professor Fraser.

123. The general results will be found Appendix C *e*.

JOHN HARKNESS.

2. HISTORY, GEOGRAPHY, POLITICAL ECONOMY, AND INDUCTIVE PHILOSOPHY.

HISTORY.

124. The First Year Class studied with care Heeren's Political System of Europe and its Colonies, from the commencement of Modern History to the Religious Peace of 1555. The philosophic principles of the brief but masterly introduction of this work were illustrated at great length orally in class; and these important elements of the scientific interpretation of modern history were by degrees fully, I think, apprehended by the major portion of the class. "

125. The Reformation,—upon which the peculiar character of the First Period of Modern History so much depends,—was studied as much as possible under its political aspect, and

enforced with the full conviction of the light which the proper understanding of this great and new impulse of the human mind would throw on the subsequent History of Modern Civilization.

126. The History of the Foundation and the Affairs of the Colonial Establishments was greatly aided by the lessons of Physical and Commercial Geography, and of Political Economy ; and, in its turn, was made to render reciprocal service in illustrating many of the facts and theorems of these sciences—the three cognate subjects thus, with benefit to themselves, exemplifying Lord Bacon's dictum, "*Nemo enim rei alicujus naturam in ipsâ re recte aut feliciter perscrutatur.*" The first chapters of Murray's *India*, on the Portuguese Discoveries, &c. were read, to afford fuller historic detail.

127. The History studied by the Second Year Class extended from the commencement of the Age of Louis XIV. to the Peace of Belgrade.

128. The History of the Formation of the Mercantile System, its maxims, its injurious influence on France, England, and Holland, and the wars which resulted from its operation, were attentively studied ; and the profound and extended views of the historian (Heeren) were shown to perfectly harmonize with the best teachings of economic science, in which last subject the class were very opportunely studying at the same time the general subject of Money and the Currency. Here, again, History and Political Economy were employed to afford mutual service.

129. It seems unnecessary to give a detailed account of the manner in which the many important events of this period were studied ; but I may state in general that the attention of the students was always directed to the leading ideas which would at once serve to give the philosophic explanation of the circumstance, to award it its due measure of historic importance, as well as aid in registering it in the memory. In this respect Macaulay's *Historical Essays* occasionally rendered valuable assistance.

130. The History of the Colonies of the French, English,

Dutch, &c., from 1661 to 1740, was frequently made more vivid and intelligible by the aid of Commercial and Physical Geography.

GEOGRAPHY.

131. The introduction during the last year of the important subject of Physical and Commercial Geography into the subject of study of the First and Second Year Classes, in addition to Political Geography, has been attended by the most profitable results, both directly in extending their knowledge of Geography, and reflexively in connection with the thereby improved reading of History and Political Economy.

132. The First Year Class especially, having been provided earlier in the year with text-books, have made most creditable progress; and their answering at the examinations was only commensurate with the diligence they had daily manifested in prosecuting this most attractive as well as most important study. The brevity of indeed all text-books on this subject, suited to the time and purse of the students, necessitates that a great deal of information and explanation be supplied by the instructor; but I always required of the students to throw into the form of 'essays' or compositions the substance of such lectures, to aid them in digesting them, and storing them in their memory; and I encouraged every attempt on their part of spontaneously developing the consequences of any principle further than I had done for them. And to allure them into the acquisition of this excellent mental habit, I usually asked the cleverer students of the class to write their essays after I had sufficiently broached the leading ideas, but before I had finished the teaching of the particular subject in hand.

133. It would be tedious to enumerate all the special branches of climatical, productional, or industrial, &c. interest, which have been to some degree studied. However, much more has been done than would meet the requirements of the poet of the Roman Georgics—

“ Ventos et varium cœli prædiscere morem

“ Cura sit, ac patrios cultusque habitusque locorum :

“ Et quid quæque ferat regio, et quid quæque recuset.

“ Hic segetes, illic veniunt felicius uvæ ;

“ Arborei factus alibi,” &c.

134. And the bard's philosophy, that such matters are governed by natural laws,—

“ Continuo has leges æternaque fœdera certis

“ Imposuit Natura locis,”—

was established, to the full conviction of (I think) every member of the class. In fact, the employment of the abstract laws of science,—studied in one direction under the Professor of Chemistry and Natural History, and in another under that of Mathematical Physics,—to explain many of the empirical facts of the various kingdoms of nature, at once gave exercise to some of the finest faculties of the mind, and exemplified the grand sequence of cause and effect in many of its most sublime, attractive, and indisputable forms. Besides, in particular reference to the explanation of a stationary or progressive civilization, a habit of careful and minute observation was likely to be elicited, by the students seeing, and reflecting upon what seemingly trivial circumstances the widely distinctive characters of various countries and nations depend.

135. In illustration of the lowlands, highlands, watersheds, &c., the class had the advantage of examining, in the library of the Royal Asiatic Society, the model of Monte Rosa, of Messrs. Schlagenweit; and I explained to them the very simple methods employed, both in the field and laboratory, for constructing such casts. Dr. Wilson's Relief of Palestine also afforded a very excellent idea of a part of the earth's surface, and formed a connecting link between the type of Monte Rosa and the ordinary map-representation. I availed myself of the opportunity of their visit to the Asiatic Society to illustrate their readings in other parts of Geography by aid of the specimens in its Museum. The model of the Thull Ghauts, in the Rooms of the Geographical Society, was also inspected.

136. The explanation of some local phenomena formed an attractive and excellent application of the more abstract principles of science. More particularly, the analysis of the recent terrific

hurricane, and the explanation of the ascent of Mr. Knight's balloon, first to the east and afterwards—in a higher stratum of air—to the west, gave (so to speak) a “local habitation” to the thought in discussing the laws of certain atmospheric phenomena. And the facts of the monsoon, and of the land and sea breezes, were as interesting, as they were appropriate, subjects of study.

137. I should not omit, that the class was introduced to a more fundamental and comprehensive discussion of the subjects of the tides and currents, than is to be found in any elementary text-book; and that, by their assiduity and attention, they have succeeded in mastering, and in applying the physical notions, on which the explanation of these phenomena of Commercial Geography depend.

138. The geographical studies of the Second Year Class were similar to those of the First; but a sufficient supply of text-books not being procurable till an advanced period of the year, their time for this study was much more limited, and consequently the amount of information acquired not so extensive.

139. From want of time, also, the valuable exercise in Topographical Geography, of making map-projections, was not attempted. However, that indispensable branch of accurate geographical study will be sufficiently cultivated in the ensuing year; and the translations of the various systems of projections—the orthographic, stereographic, globular, conical, &c.—from one into any of the others will also be practised, as alone producing an adequate and habitual conviction of the importance of the meridians and parallels as the only true tests of geographical comparison.

POLITICAL ECONOMY.

140. My report of last year on this department was so detailed in all the classes, as to dispense with my entering into the subject with much minuteness on the present occasion. The same interest, however, in treating the various branches of the science of Wealth, continued to prevail throughout all the classes.

141. In order to lay the foundation as broadly and securely as possible, I gave the First Year Class several introductory lectures, on the nature of science in general, illustrated by such examples as were familiar to them ; on the necessity of technical terms, both as instruments in the treatment of a science, and as records of the inductive steps in its development ; and I endeavoured, by ample illustrations, to impart and fix the fundamental idea of wealth or exchange-value, and to state some principles of human nature which play an important part in economic science. The substance of these lectures was worked into the form of essays by the students. Mr. Mill's and Mr. Senior's standard treatises on the sciences were the text-books of the class.

142. The Second Year Class pursued the subject of Value to a greater length than they had done the preceding year, with the special addition of the Currency, and the elements of Banking.

143. The Third and Fourth Year Students, besides the the currency and banking, discussed the leading principles of Government Influence, and particularly of Taxation. I beg to thank Professor Fraser for having kindly proposed the paper questions to this class at the late examinations.

INDUCTIVE PHILOSOPHY.

144. The principles on which the great fabric of the inductive sciences rests, and the methods by which it has been reared, have justly formed, since the time of Bacon and Des Cartes, a province of intellectual education complementary to the deductive culture best attainable from the study of the mathematics, and other demonstrative sciences. The Third Book of Mill's System of Logic, Ratiocinative and Inductive, with extracts from the Fourth and Fifth Books, received a great share of attention from the students of the Third and Fourth Years. But Dr. Whewell's comprehensive History of the Inductive Sciences, as well as his Philosophy of them,—works eminently fitted to produce a due appreciation of the nature, force, and beauty of inductive reasoning,—were frequently called on to lend valuable assistance. The views, too, of Sir John Herschell, from the Discourse on the

Study of Natural Philosophy, as well as the more recent ones of Liebig in his Letters on Chemistry, I brought forward as occasion offered.

145. But of all books, none is to be compared, as well from its general utility, as in its special adaptability, to the Indian, and more particularly the Hindu Student, with the works of Bacon himself. The habits of thought, in his day prevalent through the greater part of Europe, which Bacon is continually combating, I have frequently found to be the present mental condition of the more speculative of our Indian youth, and especially the Brahmans. This is a circumstance probably worth noting in the mental history of the country ; and I know of no artillery that can be brought to bear on it with the same effect as that of the Prefaces, the Fifth Book of the *De Augmentis Scientiarum*, and the First Book of the *Novum Organum*. The prominent views of these were accordingly inculcated with much care.

146. The principles of Inductive Philosophy were traced throughout the various sciences which were taught as well by the other Professors of the Institution as by myself. However, by the sort of natural prerogative, in this respect, which belongs to the most perfect of the sciences—Astronomy, its various steps of development, from the earliest speculations down to those of the present day, afforded instances of inductive ascent, the most easy of steady and firm apprehension, and the most irrefragable.

COMPOSITION.

147. The importance attached by the Board to this subject (paragraph 34, Board's Report, 1853-54) has induced me to continue, to the best of my ability, the marked attention which its cultivation received under Professor Reid.

148. By the First Year Class, to whom this exercise was the most requisite, so large a number of essays as 315 were written on the following subjects:—1, Preliminary Notions of Science in general, and with particular reference to Political Economy (the

substance of this had been given by lectures to the class) ; 2, Value ; 3, Capital ; 4, Rent ; 5, Portuguese Discovery of the Passage to India ; 6, Political Aspect of the Reformation ; 7, The Tides ; 8, The Currents ; 9, The Atmosphere.

149. Of these essays, a large proportion was examined after the manner described in my report of last year, but not with that accuracy, and attention to the students' articulation and modulation of the voice, which I could have desired. But to effect this is really impossible in the present building, which is so inadequate to the increased, and yearly increasing, requirements of the College Department.

150. The compositions of the Second, Third, and Fourth Year Classes were also adapted to the subjects studied under me during the Session. In the Second Year, probably a preponderance was given to economic essays ; but the difficult study of money and of the currency in general, and the discussion of the laws of international values, the refutation of the doctrine of a general over-supply, and the like, induced me to throw a little more weight into the economic scale, with this class. Again, in the Third and Fourth Year Class, I directed more special attention to the treatment, in their essays, of the difficult and all-important questions of the philosophy of induction. But in no class was exclusive regard paid to this mode of cultivating any single subject which was being studied under me.

151. In connection with this subject, in which I have now had so much experience during the last two years, and more particularly after the late examinations, when it fell to my lot to examine the enormous quantity of 1,207 folio pages of written answers in my own departments alone,—excluding all mention of the part I had the pleasure of taking in the Mathematical and Physical Examinations,—I am happy to say that the general English orthography of the students is improving. Yet it is still very imperfect. This deficiency of the indispensable accomplishment of good English spelling may, I think, with some degree of truth, be traced to the unsettled state of the orthography which prevails, more or less, in all the Vernacular languages ; as the habits of doubtfulness and of want of precision, contracted

in the language they first learn, are easily transferred to the English, in which, moreover, the orthoepy so frequently is at variance with the orthography. However, the successful eradication of such weeds must be commenced earlier, and I trust the remarks which I have made, after giving much consideration to the subject, in their more suitable places (paragraphs 93 and 100), in reference to the antecedent training for the College, will meet with the Board's approval. Further, from this one defect, a very erroneous opinion is often inferred respecting the general character, both as to quantity and quality, of the education which may be acquired within our walls.

R. S. SINCLAIR.

3. MATHEMATICS AND NATURAL PHILOSOPHY.

152. The studies of the four classes are specified in the programme.

153. Some of the First Year Students copied plans at home, in order to acquire a facility in the use of the mathematical instruments they had been shown in class. They also studied the principles of the theodolite, the Y level, the prismatic compass, and the box-sextant; which were illustrated by aid of the instruments belonging to the Institution. In connection with the study of spherical trigonometry, an out-door lesson was given one evening, to enable these students to acquire a knowledge of the astronomical lines, and of the manner in which the places of the heavenly bodies are determined, by reference to them. I was able to show, through the kindness of Mr. Cowasjee Shapoorjee, Assistant Master, an equatorial dial, which very much assisted them in understanding clearly the principles and construction of dials in general. In addition to the lessons on Mechanics in Orlebar's Course of Mathematics, Vol. I., they have also worked almost all the exercises given in the 1st Part of a "Manual of Mechanics by the Rev. Joseph A. Galbraith, A.M., and the Rev. Samuel Haughton, A.M.," Fellows of Trinity College, Dublin, which excellent little treatise Professor Sinclair

had the kindness to inform me of, and to furnish me with a copy of it. In the study of Mechanics by this class, and of Hydrostatics and Hydraulics by the Second Year Class, Johnston's Diagrams were found very useful.

154. According to the course of study sanctioned by the Board, the subject of Electricity should have been taught in the Second Year Class; but finding that it was included in Dr. Giraud's Course on Chemistry, I changed it, with the consent of the Principal, for that of the steam-engine, and locomotives. Though the class had the use of Reynolds's large diagrams, they did not acquire a sufficiently clear comprehension of the general construction of these engines, nor did they fully appreciate their practical importance, arising as much from their great power, as from the vast variety of their practical applications, till they were enabled to visit the Dockyard Factory, through the kind permission of Mr. Ardeshir Khurshedji Wadia, Chief Engineer; the Steamer *Assaye*, through the kindness of Mr. Hirjibhai Merwanji Wadia, Assistant Builder; and the Boree Bunder Railway Station, through that of Mr. Roche, Traffic Manager. I take this opportunity of tendering to these gentlemen my best thanks.

155. In Physical Geography, the Third Year Class studied, in addition to the first nine chapters of their text-book, several maps from Johnston's Physical Atlas, 4to edition, and Reynolds's Diagrams.

156. There were 9 Fourth Year Students at the commencement of the year, of whom 5 left before its end. Two only of the remaining four were present at the examination, one being sick, and one absent.

157. In addition to the regular daily lessons and exercises, the students of all the classes wrote weekly exercises, especially with the view of acquiring habits of accuracy and clearness, in the treatment and description of scientific subjects.

158. Professor Sinclair has had the kindness to propose the paper questions to the Second, Third, and Fourth Year Classes, and to examine their answers. I beg to tender my best thanks to him for the very kind manner and readiness with which he

acceded to my request to examine these classes, although, by doing so, he took upon himself a large amount of labour, in addition to the heavy work of the examination of his own classes.

159. The following is his report on these examinations:—

“(a). In my examination, I endeavoured to run through the whole extent of the business for which, the Professor of Mathematics and Natural Philosophy informed me, the students were accountable, by proposing one or more leading questions selected from every part of it; and sometimes to couch the questions in forms a little different from those given in their text-books, or to apply the principles they had learned therein to new cases. By this mode of examination, justice was most likely to be paid, as well to the mathematical talent of the student, as to his industry.

“(b). With reference to the Second Year Students, the general answering, I think, was very creditable. The best attempt at the solution of the second question—one new in its form to the students, but of great interest and importance from its relations to our solar system—was made by Bal Govind, who appears to have manifested in his answering the best mathematical head of any in the class.

“(c). With respect to the first hydrostatical question, the principle or idea of fluidity has not yet been attained in its true simplicity and generality by indeed any member of the class. But at this I am not surprised; as universal experience teaches how much more difficult it is to acquire adequately—*i. e.* neither defectively nor redundantly—principles which are to be arrived at only by the *inductive* process, than to make deductive applications of them. In the latter exercise, the performance of the class was in general perfectly correct.

“(d). The class's knowledge of the principles of the railway locomotive engine, and of the appliances employed in working it, was, for the most part, highly creditable; and the introduction of this important application of natural philosophy, and of the mechanical arts, formed a valuable addition to their physical instruction.

“(e). The answering of the Third Year Class was generally

very fair—as fair as could be expected from a single year's study of the difficult branches they were examined in. The principles of differentiation, and especially of differentiating *functions of functions*, are not, however, by any means completely mastered, as was evidenced in the answers to the rather trying operation of deriving the expansion of Lagrange's Theorem ; but a thorough understanding of such processes could not be attained in the short period of one year, nor without a great deal of exercise. It might also be advisable, that as many of the class as may remain in the College during the present year (1855) should revise the general doctrine of Poinso't's Couples, and pay particular attention to the geometric treatment of it, which has introduced so much clearness into the fundamental ideas of mechanics.

“(f). The answers to the questions of deriving the eccentricity of the earth, and the lengths of its polar and equatorial radii from certain data, as also to those in physical geography, were, for the most part, very correctly given.

“(g). The aggregate answering of Ganesh Dhondeo was the best ; but, if I mistake not, Motilal's treatment of the questions was characterized by a larger share of mathematical power, though applying a smaller amount of acquired knowledge. Moroba's and Edalji's names, also, I think deserving of mention.

“(h). Of the two Fourth Year Students, Kahandas Tapidas's answering displayed much the larger acquaintance with the subjects of examination.

“ R. S. SINCLAIR.”

160. The result of the examination of all the classes, together with the per-centage of marks obtained for work done throughout the year, and a statement of attendance, are given in the accompanying tables. On reference to them, it will be seen that Murlidhar Girdhar of the First Year Class, Bal Govind of the Second Year Class, Ganesh Dhondeo of the Third Year Class, and Bhairao'nath Mangesh of the Fourth Year Class, have obtained the highest marks for work done throughout the year, and they therefore deserve commendation.

161. Selections from answers to the paper questions are given in Appendix E.

DADABHAI NAOROJI.

RESULTS OF THE ANNUAL EXAMINATION, DAILY ATTENDANCE, AND WORK, DURING THE YEAR 1854.

FIRST YEAR STUDENTS.

Order of Merit.	NAMES.	Results of the Examination.			Percentage of Marks obtained during the Year.	Attendance.			
		Paper.	Viva voce.	Total.		No. of Class Days.	Present.	Sick.	On leave.
	Value..	60	40	100					
1	Ramkrishna Gopal	50	38	88	76	183	151	1	17
2	Murlidhar Girdhar	48	40	88	88	183	170	..	12
3	Harkisandas Goverdhandas . .	37	40	77	80	163	137	25	..
4	Tribhuvan Dwarkadas	40	36	76	59	183	170	12	1
5	Narmadashankar Lalshankar.	37	34	71	55	142	74	8	12
6	Dadabhai Pestanji	44	24	68	57	183	181	1	..
7	Javerilal Umiasankar	41	24	65	59	183	178	2	2
8	Fardunji Beramji	30	32	62	62	183	175	..	2
9	Beramji Naoroji	33	26	59	19	183	165	9	5
10	Bhujangrao Krishna	25	32	57	35	183	163	9	2
11	Mancherji Bamanji	27	28	55	49	183	177	2	2
12	Rustamji Manekji	17	36	53	16	183	183	..	..
13	Khurshedji Sorabji }	26	24	50	60	183	156	25	..
14	Vinayak Narayan }	24	26	50	9	183	177	2	4
15	Bamanji Bhikaji	17	32	49	45	162	160	..	2
16	Nasarwanji Jamasji	22	24	46	31	183	179	..	4
17	Bhai Jivanji }	17	26	43	40	183	158	12	4
18	Kaikobad Kavasji }	7	36	43	37	137	91	33	4
19	Rustamji Sorabji	22	20	42	28	183	179	4	..
20	Babaji Kashinath	9	30	39	37	16	139	21	2
21	Pestanji Naoroji	21	8	29	19	183	179	..	3
22	Sokar Bapuji	14	12	26	13	183	148	31	3
23	Jamshedji Palanji	14	4	18	41	183	177	5	1
24	Shamrao Bhaskar	10	8	18	12	183	175	7	..
25	Jahangir Jamshedji	10	6	16	25	108	86	6	11
26	Khurshedji Nasarwanji	8	6	14	33	163	164	3	1
27	Kawasji Hirjibhai	11	2	13	38	183	177	2	4
28	Manek Balaji	5	0	5	6	183	128	47	2
29	Sorabji Palanji }	4	0	4	23	183	178	2	1
30	Sorabji Nasarwanji }	2	2	4	4	183	138	39	2
31	Sorabji Framji . . . . .	..	..	..	42	183	175	6	2
32	Rustamji Naoroji	0	0	0	25	183	174	1	..
33	Ardeshtir Dhanjibhai	0	0	0	6	183	..	2	4

SECOND YEAR STUDENTS.

Order of Merit.	NAMES.	Results of the Annual Examination.			Per-centage of Marks obtained during the Year.	Attendance.				
		Paper.	Viva voce.	Total.		No. of Class Days.	Present.	Sick.	On leave.	Absent.
1	Jagannath Narayan.....	41	40	81	80	180	166	11	2	1
2	Bal Govind.....	42	34	76	87	180	176	0	1	3
3	Shrikrishna Narayan.....	37	26	63	40	180	177	3	0	0
4	Dadabhai Rustanji)	36	26	62	57	180	158	18	3	1
5	Jabanghir Framji)	32	30	62	41	180	115	58	5	2
6	Ambaram Kevakam)	28	34	62	34	180	155	3	17	5
7	Shridhar Vithal.....	29	30	59	31	180	144	32	4	0
8	Pestanji Edalji..	27	30	57	43	180	178	1	0	1
9	Keshavarao Bhaskar.	23	30	53	42	180	119	53	7	1
10	Rustanji Ardeshir.....	16	34	50	50	180	163	12	3	2
11	Hormazji Dadabhai.....	23	26	49	24	180	179	0	0	1
12	Barjodji Framji.....	22	26	48	18	180	159	14	4	3
13	Pandurang Hari	29	16	45	12	180	161	0	19	0
14	Shivashankar Govindram) ..	11	30	41	29	180	164	12	3	1
15	Madhavarao Bhaskar) ..	21	20	41	9	180	144	20	13	3
16	Shamrao Pandurang	29	10	39	39	180	171	6	1	2
17	Bhaskar Balkrishna	20	16	36	60	180	155	6	15	4
18	Mancherji Beramji)	19	10	29	14	180	180	0	0	0
19	Dhirajlal Mathuradas)	19	10	29	12	180	144	22	9	5
20	Karsundas Mulji)	15	10	25	16	180	154	20	2	4
21	Gopinath Sadashiva)	13	12	25	21	180	173	5	1	1
22	Nanabhai Hari Trinbak....	10	0	10	22	180	138	42	0	0
23	Ramdas Bhanji.	9	0	9	17	180	169	10	0	1
24	Madhavarao Kanoba.....	4	2	6	12	180	124	56	0	0
25	Antonio L. Fernandes	4	0	4	8	180	144	16	9	11
26	Phirosha Kawasji.....	Sick	Sick	..	13	180	177	2	1	0

THIRD YEAR STUDENTS.

NAMES.		Results of the Examination.			Per-centage of Marks obtained during the Year.	Attendance.				Date of leaving.	
		Paper.	Vivā voce.	Total.		No. of Class Days.	Present.	On leave.	Sick.		Absent.
Value..	60	40	100								
1	Ganesh Dhoneo.....	44	32	76	88	118	98	11	0	0	
2	Moroba Sundarji.....	36	35	71	49	75	67	0	5	3	
3	Motilal Jivandas.....	34	32	66	84	74	56	10	3	5	
4	Somnmarayan Nandharayan.	25	32	57	31	118	90	21	4	3	
5	Edulji Shapurji.....	32	24	56	87	118	114	2	2	0	
6	Ramakrishna Narayan.....	15	37	52	49	73	66	0	6	1	
7	Nilakanth Mahadavarao ..	11	35	46	58	118	94	13	7	4	
8	Harichandra Antoba.....	17	29	46	78	118	109	10	4	1	
9	Parashram Vishnu.....	13	21	34	15	118	86	7	20	2	
10	Dadabhai Mancherji.....	12	19	31	67	118	100	4	7	1	
11	Mahipatram Ruparam	9	16	25	55	118	109	7	1	1	
12	Pandurang Balabhadra....	8	8	8	87	118	100	6	7	0	
13	Ganpatrao Bhaskarji.....	..	..	..	45	97	85	10	2	0	11th October.
14	Darasha Dorabji.....	..	..	..	0	50	30	17	2	1	15th June.

FOURTH YEAR STUDENTS.

1	Kahandas Tapidas.....	41	31	72	49	93	78	2	12	1	
2	Ganput Madanji.....	15	9	24	35	93	78	3	10	2	
3	Balkrishna Sadashiva ....	..	..	..	42	93	27	4	12	0	1st August.
4	Bhairaonath Mangesh ....	..	..	..	51	93	70	3	11	0	10th October.
5	Fardunji Jamshedji.....	..	..	..	50	93	27	0	0	2	1st May.
6	Talakechand Manekchand..	..	..	..	26	93	64	1	2	6	9th October.
7	Mahadaji Wasudeo.....	..	..	..	28	93	70	12	11	0	
8	Naoroji Beramji.....	8	8	8	31	93	88	1	2	2	

4. CHEMISTRY AND BOTANY.

162. The First and Second Year Students have together attended a course of chemical lectures, embracing the consideration of the laws of chemical combination, with the atomic hypothesis; the subjects of light, and heat, chiefly in their chemical relations; frictional, voltaic, and animal electricity; electro-magnetism and magneto-electricity; the chemistry of all the non-metallic, and of certain selected examples of the metallic elements.

163. In treating of the forces of light, heat, electricity, magnetism, and chemical affinity, their relations to natural phenomena were kept prominently in view; and the consideration of the elementary bodies and their compounds had reference chiefly to the conditions in which they exist in nature, and to their applications in the arts.

164. I have, during this Session, held more frequent examinations of the class than in any previous year; and the result has proved to me the value of these opportunities for more familiar and colloquial explanations and illustrations than formal lectures afford. I have also, by the same means, been able to ascertain the particular points, with reference to which Native students, in studying a science through the medium of a foreign language, are peculiarly liable to misapprehend both their teachers and their text-books.

165. With regard to the Annual Examination of the class, I have chiefly to notice the very marked superiority of the First Year Students, as compared with those of the corresponding class of last year; as is shown by the average number, expressing the value of their answers, being higher, and by those general impressions left upon the mind of the Examiners, which cannot be expressed by numbers.

166. The Botanical Class consisted of the Third and Fourth Year Students, to whom a course of Lectures was delivered (accompanied by examinations) on structural and physiological botany, and the principles of botanical classification.

167. As the botanical course is the only opportunity afforded the students of the College for acquiring a knowledge of the general laws of vitality, the attention of the class was principally directed to the mode of growth and reproduction of plants ; the analogies of their structure and functions to those of the members of the animal kingdom ; the influence they exert upon the soil, and upon the atmosphere ; and the general balance of organic nature.

168. In illustration of the department of structural botany, the several vegetable tissues were exhibited under the microscope ; and specimens from the *Flora* of the island were brought into the class-room to illustrate vegetable organography, and the principles of botanical classification. Diagrams were also abundantly employed.

169. At the examinations held during the Session, and more particularly at the final Annual Examination, I was most painfully impressed with the proofs these examinations afforded of the general almost total want of the desire or the power (I know not which) to observe either those objects of the vegetable kingdom which were prominently brought to the notice of the students in the class-room, or such as abound in the gardens, fields, and hedgerows of the island ; the microscope or even the pocket lens being seldom or never had in requisition by them.

170. Natural History studies are peculiarly fitted to develop the powers of observation ; and I hope to be able in future to impress more forcibly upon the Classes of Botany and Geology that these subjects are presented to them, not merely for the purpose of imparting a certain amount of technical knowledge, but also as means of mental culture.

HERBERT GIRAUD, M.D.

APPENDIX A.

Number and Description of Pupils in each Class.

I. BRANCH SCHOOLS.

1st.—FORT.

CLASS.	Division.	No. of Pupils.	No. of Pay-Pupils.*	Age.								Time in English School.			Caste.				
												Maximum.	Minimum.	Average.	Vanla.	Parsi.	Khatri.	Portuguese.	Shawak.
				8	9	10	11	12	13	14	15	Years.	Months.	Years.					
I.....	....	33	32	2	3	3	9	14	..	1	1	1½	3	0-39	..	32	..	..	..
II.....	....	38	34	..	3	6	10	9	7	2	1	2	3	0-96	1	36	..	..	1
III.....	2nd....	28	27	..	3	4	7	5	6	3	..	2½	3	1-59	1	28	..	..	..
	1st....	40	33	..	3	6	11	7	11	1	1	2½	18	1-85	1	36	1	2	..
•	Total..	139												Total..	3	132	1	2	1

* The Fee is Rs. 2 a-month ; but a boy who is unable to pay that sum may be entered as a *Free Pupil*, provided his average place be above the middle of his class.

III. COLLEGE.

Number and Description of Students.

	No. of Students.	Age.										Caste.																					
		16		17		18		19		20		21		22		23		24		Brahman.	Shenvi.	Parbh.	Vania.	Joshi.	Sonar.	Shawak.	Guj. Brahman.	Khatri.	Parsi.	Christian.	Bhatta.	Kulmi.	Marathi.
First Year Students	35	1	5	5	9	8	4	1	2	..	2	1	5	2	..	2	1	20	..	1	1	1	1	1	1	1	1	1	1	1	1	1	
Second Year Students	26	..	1	4	5	7	6	2	..	1	3	..	7	1	..	2	2	8	..	1	1	1	1	1	1	1	1	1	1	1	1	1	
Third Year Students	12	..	..	..	2	..	5	2	1	2	2	..	3	..	1	..	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Fourth Year Students	4	..	..	..	..	..	..	1	..	3	1	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	77										8	1	16	4	1	2	2	4	4	31	1	1	1	1	1	1	1	1	1	1	1	1	1

General Comparative View of Castes.

	Hindus.	Parsis.	Musalmans.	Jews.	Christians.
I. Branch Schools	76	188	5	0	2
II. Central School	232	315	14	3	16
III. College	45	31	0	0	1
Total.....	353	534	19	3	19
Grand Total....					928

APPENDIX B.

GENERAL PRIZE LIST.

I. BRANCH SCHOOLS.

1st—*Fort.*

Class.	Division.	Names.	Prize in
I. . .	.....	{ Nasarvanji Naorozji	English.
		{ Dadabhai Pestanji	Gujaráti.
		{ Kavazji Mancherji	Arithmetic.
II. . .	.....	{ Dinsha Dadabhai	English and Gujaráti.
		{ John A. De Silva	Arithmetic.
		{ Dorabji Rustomji	Arithmetic.
	2nd . . .	{ Kavazji Mancherji	English.
		{ Phirozsha Mervanji	Gujaráti.
III. . .		{ Beramjee Kavazji	Arithmetic.
		{ Louis Duartinio	English.
	1st.	{ Jagannath Meghji	Gujaráti.
		{ Pestanji Sorabji	Arithmetic.
		{ Dadabhai Rustamji	Arithmetic.

2nd—*Mumbadevi.*

Class.	Division.	Names.	Prize in
I. . .	Maráthi. . .	{ Balaji Jagannath	English.
		{ Sadashiva Ramchandra	Maráthi and Arithmetic.
	Maráthi. . .	{ Dhondu Nilkanth	English and Arithmetic.
II. . .		{ Randas Ananta	Maráthi.
	Gujaráti. . .	{ Harkisan Makandas	English.
		{ Sajan Karim	Gujaráti and Arithmetic.
		{ Khodabaksh Gustadji	Arithmetic.
	2nd Guj. . .	{ Tulsidas Devidas	English and Gujaráti.
III. . .		{ Dadabhai Naoroji	Arithmetic.
	1st Guj. . .	{ Harkisan Kashidas	English.
		{ Ramprasad Trimbaka	Gujaráti and Arithmetic.

II. LOWER CENTRAL SCHOOL.

Class.	Division.	Names.	Prize in
II. . .	Maráthi.	Vishnu Sadashiva	English and Arithmetic.
		Atmaram Vishnu	Maráthi. [metie.
	2nd Mar.	Sitaran Bhaskar	English, Maráthi, & Arith-
		Govind Vishnu	English & Maráthi. [metie.
III. . .	1st Mar..	Ramchandra Mahadeva . . .	English, Maráthi, & Arith-
		Vasudeva Raghunath	English and Arithmetic.
	2nd Guj.	Maukji Barjodji	English and Arithmetic.
		Sorabji Pestanji	Gujaráti.
	1st Guj. .	Hormazji Pestanji	English.
		Bezanji Dadabhai	English.
		Nanabhai Chhanji	Arithmetic.
		Hormazji Ratanji	English.
	Maráthi.	Jagannath Atmaram	English.
		Bhaskar Shivararn	Maráthi.
IV. . .	4th Guj. .	Anandrao Putlaji	Arithmetic.
		Kavazji Rustanji	English.
		Dadabhai Pestanji	Gujaráti and Arithmetic.
		Pestanji Edalji	English.
	3rd Guj.	Jamshedji Framji	Gujaráti.
		Bezanji Hormazji	Arithmetic.
	2nd Guj.	Rustanji Jamshedji	English.
		Narbheram Ramshankar . .	Gujaráti.
		Pestanji Shapurji	Arithmetic.
		Framji Bamanji	English.
	1st Guj. .	Framji Shapurji	Gujaráti.
		Hormazji Nashirvanji	Arithmetic.

III. UPPER CENTRAL SCHOOL.

Class.	Division.	Names.	Prize in
V. . .	Maráthi. .	Mahadaji Vishnu	English.
		Raghunath Narayan	History and Maráthi.
		Babu Ramchandra	Mathematics.
	2nd Guj.	Saifud-din Shamsud-din . .	English.
		Virji Pradhán	History.
		Brijbhukan Atmaram	Gujaráti.
		Pestanji Khurshedji	Mathematics. [ráti.
	1st Guj. .	Framji Mervanji	English, History, and Guja-
		Kavazji Mendozji	English, History, and Guja-
		Pestanji Kavazji	Geometry. [ráti.
VI. . .	2nd	Motiram Trikamdas	Algebra. [ráti.
		Kavazji Hormazji	English, History, and Guja-
		Rustanji Hirjibhai	English, History, Gujaráti,
		Louis Philippe de Rozario.	English. [and Geometry.
		Ardeshir Pestanji	History.
		Nasarvanji Jamshedji	Algebra.
	1st	Sadánand Balcrishnu	Sanscrit.
		Hormazji Mervanji	Persian.

APPENDIX C.

GENERAL RESULTS OF ANNUAL SCHOLARSHIP EXAMINATION.

DECEMBER 1854.

a.—Candidates for Clare (Junior) Scholarships.

Class.	Rank.	NAMES.	Trans- lation.		English Litera- ture.		History and Geo- graphy.		Arith- metic and Mathem- atics.		Value.	
			From Vernacular.	Into Vernacular.	Viva voce.	Paper.	Viva voce.	Paper.	Viva voce.	Paper.	Answers required.	Full Answers.
SCHOLARS.	Stipendiary.	Value..	40	10	35	35	30	70	40	60		350
		1 Bala Mangesh	29	28	23	12	30	55	32	54	263	
		2 Narayan Mahadeo	31	33	24	16	30	61	28	29	255	
		3 Vinayak Sakharum	25	32	22	11	20	43	19	59	231	
		4 Khurshedji Dinsha	22	30	23	12	16	44	25	51	223	
		5 Bhaskar Hari	35	33	23	16	30	43	13	26	219	
		6 Vishnu Morelwar	31	29	23	8	20	49	21	30	211	
	7 Vishnu Ghanashyam	33	37	13	17	21	44	16	24	210		
	Free.	8 Atmaram Balerishna	20	22	22	16	16	61	16	33	206	
		9 Bhai Ramchandra	29	30	21	6	21	42	15	26	196	
		10 Vasudeva Jagannath	26	27	26	11	10	63	11	21	195	
		11 Sadanand Balerishna	33	27	24	10	26	41	7	25	193	
		12 Hirjibhai Aspadaarji	20	25	26	12	21	43	12	30	192	
		13 Jamshedji Nasarvanji	19	7	23	12	39	61	12	39	187	
		14 Rustamji Hirjibhai	0	12	32	17	30	48	2	21	185	
		15 Narayan Janardhan	16	30	21	11	10	26	23	47	184	
		16 Karsandas Mahadavadas	24	32	23	7	20	34	9	33	182	
		17 Nasarvanji Jamshedji	18	17	7	8	10	40	27	45	181	
		18 Sadanand Shivashankar	25	28	14	10	22	34	12	33	178	
19 Vinayak Moroji		29	32	10	11	26	41	0	20	175		
STUDENTS.	Free.	20 Naroji Shapurji	14	10	21	8	30	46	13	22	173	
		21 Dhangibhai Rustamji	16	19	12	9	20	39	21	34	170	
		22 Dosabhai Rutanji	12	10	22	8	20	55	8	26	167	
		23 Jainshedji Baramji	19	23	21	10	20	33	13	27	166	
		24 Hormadji Mervanji	0	25	24	9	12	43	11	41	165	
		25 Bamanji Sorabji	0	21	22	5	24	41	12	37	162	
		26 Dosabhai Kavazji	19	19	22	7	16	27	8	36	154	
		27 Nasarvanji Bamanji	21	26	10	7	20	27	13	30	154	
		28 Rustamji Jahanghir	2	22	12	7	30	30	12	34	149	
		29 Vishwanath Jagannath	32	30	19	8	16	18	1	23	147	
		30 Uttamram Narbheram	0	28	16	10	20	31	13	27	145	
		31 Purshotam Balaji	25	31	21	4	10	27	7	20	145	
	32 Hormadji Pestanji	17	19	9	7	20	28	8	32	140		
	Paying.	33 Phirosha Manekji	8	11	11	7	0	40	20	27	133	
		34 Nanabhai Edalji	0	23	16	7	30	23	12	21	132	
		35 Dnyabhai Tribhuvandas	0	25	10	7	26	21	16	26	131	
		36 Sorabji Jahangir	0	20	25	5	22	28	0	27	127	
		37 Damodar Balerishna	9	23	9	11	0	39	8	21	117	
		38 Dorabji Hormazji	0	17	14	5	16	29	7	22	110	
39 Dosabhai Baramji		0	19	14	0	0	11	0	2	40		

b.—First Year Students.

SCHOLARS.	Class.	Rank.	NAMES.	Subjects.						Value.	
				Literature and Logic	Political Econo- my, History, and Geography.	Mathematics and Physics.	Chemistry.	Translation.	Answers returned.	Full Answers.	
			Value....	100	100	100	60	40			
SCHOLARS.	Stipendiary.	1	Ramkrishna Gopal	87	86	88	58	29	348	400	
		2	Murlidhar Girdhar	83	80	88	42	27	300		
		3	Javerilal Umiashankar.	79	83	65	41	25	293		
		4	Vinayak Narayan	75	81	50	49	30	285		
		5	Dadabhai Pestanji	66	71	68	45	15	265		
		6	Bhujangrao Krishna	73	59	57	52	24	205		
		7	Fardunji Beranji	64	66	62	54	18	204		
		8	Pribhuvandas Dwarakadas	50	81	70	36	20	263		
		9	Rustamji Manekji.	74	62	53	41	28	258		
		10	Narmadashankar Lalshankar	66	64	71	13	33	247		
STUDENTS.	Free.	11	Mancherji Batanji.....	54	63	55	40	23	235		
		12	Harkisandas Goverdandas.....	50	46	77	32	24	229		
		13	Sokar Bapuji.	73	57	26	42	24	222		
		14	Beranji Naoroji.	56	67	59	26	7	215		
		15	Nasarvanji Jamasji.....	62	54	46	32	15	209		
		16	Rustamji Sorabji.....	48	62	42	32	19	203		
	Free.	17	Shamrao Bhaskar.....	61	63	18	23	22	187		
		18	Khurshedji Sorabji.....	35	52	50	43	4	184		
		19	Kaikobad Kavasji.	58	00	43	16	5	182		
		20	Jamshedji Palanji.	55	67	18	25	15	180		
		21	Jullanghir Jamshedji	42	70	16	35	10	179		
		22	Kavasji Hirjibhi.	53	57	13	30	22	175		
		23	Bhai Jivanji	45	55	43	10	13	175		
		24	Babaji Keshinath	31	41	39	33	18	162		
		25	Bamanji Bhikaji.	39	44	49	23	7	162		
		26	Pestanji Naoroji	50	46	29	27	8	160		
STUDENTS.	Paying.	27	Manek Balaji.	41	46	5	15	19	126		
		28	Sorabji Palanji.	51	56	4	19	-12	118		
		29	Sorabji Nasarvanji	39	51	4	18	2	114		
		30	Khurshedji Nasarvanji.	45	47	14	4	-6	104		
		31	Ardeshir Dhanjibhai	37	47	0	27	-13	98		
		32	Rustamji Naoroji.....	11	33	0	10	-18	36		

c.—Second Year Students.

SCHOLARS.			Class.	Rank.	NAMES.	Subjects.						Value.	
Stipendiary.	Free.	Value..				Literature and Men- tal Philosophy.	Political Economy, History, and Geo- graphy.	Mathematics and Natural Philosophy.	Chemistry.	Translation.	Answers returned.	Full Answers.	
			1	Jagannath Narayan.....	88	78	81	52	30	329	400		
2	Dadabhai Rustamji.....	84	78	62	57	32	313						
3	Shridhar Vithal	79	89	59	52	27	305						
4	Jahangir Framji	80	78	62	48	26	294						
5	Hormazji Dadabhai.....	86	78	40	54	19	286						
6	Pestanji Edalji	81	70	57	40	28	276						
7	Bal Govind	53	63	76	32	29	253						
8	Ambaram Kevalram.....	43	69	62	44	28	246						
9	Pandurang Hari	72	71	45	30	28	246						
10	Rustaraji Ardeshir	60	69	50	49	18	246						
11	Shricrishna Narayan.....	62	60	63	36	24	245						
12	Keshavarao Bhaskar	47	50	53	31	25	206						
13	Gopinath Sadashiva	62	59	25	37	20	203						
14	Mancherji Beramji	58	46	29	60	9	202						
15	Shivashankar Govindram	50	57	41	19	26	193						
16	Dhirajlal Mathuradas.....	57	42	29	32	31	191						
17	Barjodji Framji	38	50	48	24	28	188						
18	Shamrao Pandurang	42	47	39	33	24	185						
19	Ramdas Bhanji.	65	42	9	40	25	181						
20	Karsandas Mulji.....	61	45	25	26	20	177						
21	Madhavarao Bhaskar.....	40	44	41	15	25	165						
22	Bhaskar Balkrishna.....	40	30	36	11	20	140						
23	Antonio L. Fernandes.....	58	29	4	8	20	128						
24	Madhavarao Kanoba.....	15	28	6	16	22	87						
25	Nanabhai Haritrimbak.....	6	32	10	14	12	74						

d.—Third Year Students.

Class.	Rank.	NAMES.	Subjects.					Value.	
			Moral Philosophy.	Political Economy and Induction.	Mathematics and Natural Philosophy.	Botany.	Literature.	Answers returned.	Full Answers.
		Value ..							
SCHOLARS. { Stipendiary. Free. STUDENTS. }	1	Ganesh Dhondeo	64	86	76	42	33	301	400
	2	Motilal Jivandas	61	83	66	27	28	265	
	3	Edulji Shapurji	52	88	56	36	30	262	
	4	Soumnarayan Nandnarayan	58	85	57	21	24	245	
	5	Mahipatram Ruparam	71	85	25	32	28	241	
	6	Moroba Sundarji	53	71	71	17	18	230	
	7	Nilkunth Mahadeo	47	81	46	23	26	223	
	8	Kahandas Tapidas	38	78	72	18	15	221	
	9	Ramerishua Narayan	41	63	52	29	20	205	
	10	Parasharam Vishnu	48	72	34	20	18	201	
	11	Dadabhai Maneherji	46	72	31	24	23	196	
	12	Harichandra Antoba	45	67	46	23	12	193	
	13	Gunpat Mudanji	40	57	24	23	21	165	

e.—Fourth Year Students.

Class.	Order of Merit.	NAMES.	Subjects.				Value.	
			Ethics.		Physics.		Answers returned.	Full Answers.
		Value...	Vivá voce.	Paper.	Vivá voce.	Paper.		
			30	70	40	60		
	1	Kahandas Tapidas	13	32	31	41	117	200
	2	Gunpat Mudanji	14	34	9	15	72	

APPENDIX D.

SCHOLARSHIP EXAMINATION PAPERS,
1854.

CANDIDATES FOR CLARE SCHOLARSHIPS.

4th December.—From 11 to 2.

MATHEMATICS AND NATURAL PHILOSOPHY.

Professor DADABHAI NAOROJI.

1. With what sum must a merchant commence trade so as to be worth £15,000 at the end of 12 years, if he may be expected to clear annually an eighth of his capital ?

2. Find three numbers in geometrical progression, such that their sum may be $14\frac{1}{4}$, and the sum of their squares $74\frac{1}{2}$.

3. If a, b, c , represent respectively the sides and hypotenuse of a right-angled triangle, and h be the length of the line drawn from the right angle perpendicular to the opposite side : prove that the triangle whose sides are respectively $a + b, h$, and $c + h$, is also right-angled.

4. To find the area of a quadrilateral from its two diagonals, and the angle which they include.

5. To find the altitude of an object, when its lowest point is not in the same horizontal plane with the given station, but the distance between them can be measured.

6. Latent heat ?

7. What time does a body take to fall 200 feet ?

5th December.—From 11 to 2.

HISTORY AND GEOGRAPHY.

Professor SINCLAIR.

1. Political and Social condition of the Ancient Egyptians ?
 2. *a.* Social and Political condition of Greece, with special reference to the diversity of character and institutions of the Ionian and Dorian races ?
b. The Athenian mode of paying the *dicasts* was doubly impolitic ?
 3. *a.* The progress of literature, philosophy, and the fine arts, in Greece, was due to what causes ?
b. But the seeds of dissolution were thickly sown in the Social system of the Greeks ?
 4. Draw a plan, and write a description, of the Battle of Salamis ?
 5. Foreign Commerce of the Romans in the Age of the Antonines ?
 6. General Survey of the Geographical features of India ?
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6th December.—From 11 to 2.

ENGLISH LITERATURE.

Professor HARKNESS.

1. How is English Grammar divided, and what does each part treat of ? The use of the Article ? The Indefinite Article joined to Substantives in what number only ? Any exceptions to this rule ?
2. When are the Articles properly omitted ? Do we say, "He is in great hurry," or "in *a* great hurry" ? "He is in great haste," or "in *a* great haste" ? Does it make any difference in the sense whether I say, "He showed a little judgment," or "He showed little judgment" ?
3. General rule for forming the plural of Nouns ? Mention the principal exceptions. What Nouns have no plural ? Write the plural of *court-martial*, *spoonful*, *analysis*, *nebula*, *appendix*.

4. In what circumstances is the Nominative Case placed after the Verb ?

5. The correct use of the Prepositions *to*, *at*, *in*, applied to names of places ? Give examples.

6. Paraphrase the following passages, and parse the words printed in Italics :—

- a. The *applause* of listening senates *to command*,
 The threats of pain and ruin *to despise*,
 To scatter plenty o'er a *smiling* land,
 And read their history in a nation's eyes,
 Their lot forbade : nor *circumscribed alone*,
 Their growing virtues, but their crimes confined ;
- b. O happy peasant ! Oh unhappy bard !
 His the mere *tinsel*, her's the rich reward ;
 He *praised* perhaps for ages yet to come,
 She never heard of half a mile from home ;
 He lost in errors his vain heart *prefers*,
 She safe in the simplicity of hers.

7th December.—From 11 to 2.

TRANSLATION.

(Into the Vernacular.)

Professor HARKNESS.

“ In the choice of studies, too much deference should not be paid to the bent of a young person's mind. Excellence in one or two things which may have taken the fancy of a youth (or which may really suit his genius) will ill compensate for a complete ignorance of those branches of study which are very repugnant to him ; and which are therefore not likely to be learnt when he has freedom in the choice of his studies.

“ Amongst the first things to be aimed at in the intellectual part of education, is variety of pursuit. A human being, like a tree, if it is to attain to perfect symmetry, must have light and air given to it from all quarters. This may be done without making men superficial. Scientific method, may be acquired without

many sciences being learnt. But one or two great branches of science must be accurately known. So, too, the choice works of antiquity may be thoroughly appreciated without extensive reading. And passing on from mere learning of any kind, a variety of pursuits, even in what may be called accomplishments, is eminently serviceable. Much may be said of the advantage of keeping a man to few pursuits, and of the great things done thereby in the making of pins and needles. But in this matter we are not thinking of the things that are to be done, but of the persons who are to do them. Not wealth, but men. A number of one-sided men may make a great nation, though I much incline to doubt that; but such a nation will not contain a number of great men."

7th December.—From 2 to 5.

TRANSLATION.

(Into English.)

वास्तविक म्हटलें तर या जलपर्यटनास एथूनच आरंभ झाला, कारण कीं कोलम्बसानें नेहेमी गलबतें चालविण्याचा जो मार्ग असे तो या स्थलापासून एकाएकीं सोडून दिला, आणि आपले जाण्याचा रोंख शुद्ध पश्चिमेकडेस धरून ज्या समुद्रांत जाण्याचा नेहेमीचा राबता नसे व जो समुद्र यास अज्ञात अशा समुद्रामध्यें यानें गलबत घातलें. प्रथम दिवशीं वारा अगदीं कमी होता म्हणून कोलम्बसाच्यानें फार लांब जावबलें नाहीं, परंतु दुसरे दिवशीं यास कांनेरी बेटें दिसनाशीं झालीं. त्या समर्थीं बहुतेक खलाशी लोक, जे नुकतेच भयाभीत आणि खिन्न झाले होते, त्यांनीं जेव्हां हें अघोर कृत्य मनांत आणिलें, तेव्हां इतः पर आपले दृष्टीस जमीन पुनः कधीं पडणार नाहीं असें समजून, त्यांनीं ऊर बडवायास आणि नेत्रांतून अश्रु टाकायास आरंभ केला. ते वेळीं कोलम्बसानें, आपला उद्योग अवश्य सफल होईल अशी त्यांची खात्री करून, आणि ज्या देशांस आपण जात आहों ते देश अति समृद्धिमान् आहेत यास्तव तेथें गेलें असतां मोठा धनलाभ ही होईल, अशी आशा दाखवून त्या

लोकांचें समाधान केलें. कोलम्बसाच्या बरोबरच्या लोकांची उमेद किती होती ती लवकरच दिसून आली, तेणेंकरून कोलम्बसास असें ज्ञान झालें, कीं आपले महत्कृत्याचे स्वरूपावरून जीं कितीएक संकटें अवश्य प्राप्त होतील असें दिसतें त्यांचे बराबर, तसेंच आपल्या ताब्यांतील लोकांचें अज्ञान या पासून प्रायः जीं उत्पन्न होतील त्यांचे बराबर झुजांयास आपणास सिद्ध झालें पाहिजे. दुसरें यौन असें पाहिलें कीं आपले मनांत जे शोध कर्तव्य आहेत ते समाप्तीस नेण्या करितां नौका-शास्त्रसंबंधी कुशलता आणि साहसीधैर्य या दोन गोष्टीं प्रमाणेंच लोकांचीं मनें वश करून घेण्याची युक्ति ही आवश्यक आहे. कोलम्बसाच्या व ज्या देशानें यास कामावर योजिलें त्याच्या भाग्योदयामुळें कोलम्बसाचा स्वभाव मोठ्या उत्साहाचा आणि याची कल्पनाशक्ति मोठी करामतीची असून, दुसरे प्रकारचे सद्गुण ही यामध्यें होते; असे गुण व सद्गुण एकत्र जमण्याचें म्हटलें म्हणजे विरळा. मनुष्यमात्राचें पुरें ज्ञान, मनोहरण करण्याचें चातुर्य, एकादी भसलत करण्यांत दमादमानें दीर्घ प्रयत्न करणें, स्वकीय मनोविकारांचें पूर्ण आकलन करणें, आणि अन्य लोकांचे हुरूप आपले उपयोगीं पाडून घेणें, हे सर्व गुण कोलम्बसाचे आंगांत भरले होते; या गुणांचा योगें कोलम्बसास अधिकाराचें काम करण्याची योग्यता आली होती. कोलम्बसामध्यें हे सर्व गुण असून, हा जो रोजगार करीत असे त्यामध्यें यास इतकें विशेष ज्ञान होतें कीं तेणेंकरून संकटाचा अथवा जोखिमीचा समय प्राप्त झाला असतां, भरवसा उत्पन्न होई.

7th December.—From 2 to 5.

TRANSLATION.

(Into English.)

वास्तविक इहिम्मे तो कोलम्बसनी ह्योटी सकूनो प्रारंभ अहिंयांथी थयो, कुमेडेडे पश्चिम तरङ्ग वाहाणु हंकारीने ते समयमां ले सीमासुधी

લોકો ખેપ કરતા હતા, તે સીમા છોડીને તેની પેલી તરફ અજાણ્યા
 અને બિન વહિવાટી સમુદ્રોમાં કોલમ્પસ વાહાણો ઝોકાવીને હવે આગળ
 ચાલ્યો. પેહેલે દિવસે ઘણો થોડો પવન હતો તેથી તેનાં વાહાણોએ
 ઘણો રસ્તો કાપ્યો નહીં ; પણ ખીજે દિવસે કાનેરી ટાપુઓ નજરે
 પડતાં બંદ થયાં, અને ઘણાએક ઉદાસ થએલા ખલાસિઓ, આ
 સફર ઘણી જાગ્રમ ભરેલી છે એવા વિચારથી ભય પામીને, જાણે કે
 તેઓને જમીન ફરીથી મળવાની નથી એવા શોકથી છાતી તથા માથાં
 ફૂટીને રડવા લાગ્યા. આપણું કામ પાર પડ્યાવિના રહેશે નહીં તથા
 જાંહાં આપણે જાઈએ છીએ ત્યાંહાંથી આપણે ઘણું દ્રવ્ય મલશે એવું
 કહીને કોલમ્પસ એણે તેઓને દિલાસો આપ્યો. પોતાના સોખતિ-
 ઓની એવી ચાલ જોઈને તેણે જાણ્યું કે મેં જે ભારે કામ માથે લીધું
 છે, તેમાં હરકત પડે તે મિટાડવા માટે મારે સવાધ રહેલું જોઈએ
 એટલું જ નહીં ; પણ મારા અજ્ઞાન સોખતિઓના મનમાં જે ભય
 રહે છે તેથી કાંઈ મને હરકત ન પોહોંચે, એવી હુશિઆરી રાખવી
 જોઈએ. વળી તેના મનમાં આવ્યું કે ધારેલા સોધ કરવામાટે મોટું
 ધૈર્ય તથા નૌકાશાસ્ત્રમાં પ્રવીણતા જોઈએ એટલું જ નહીં ; પણ
 તેઓની સાથે લોકનાં મન સ્વાધીન કરી લેવા નીકળા પણ આવડવી
 જોઈએ. નવી યોજના કરનારા પુરુષોનો ઉત્કંઠિત સ્વભાવ અને
 તેઓમાં કલ્પના શક્તિ હોય છે ; કોલમ્પસનાં તથા તેને આશ્રય
 આપનારા લોકોનાં હોટાં નમીય કે કોલમ્પસમાં આ ગુણો છતાં ખીજ
 એવા પ્રકારના ગુણો હતા કે તે ઉપર કહેલી પ્રતીના પુરુષોમાં ધણું કરીને
 દેખાતા નથી. મનુષ્યમાત્રના ગુણ તથા સ્વભાવને તે સારી પેઠે
 ઓળખતો હતો, તેનું ભાષણ ખીજનું મનરંજન કરે એવું હતું ; પોતાનું
 ધારેલું કામ પાર પાડવામાં તે એવો તો ઉદ્યોગી રહેતો હતો કે તેને ગમે
 એટલી હરકત આવી પડે તો પણ તે હઠી જતો ન હતો ; કામ, ક્રોધ,
 લાભ, ઈત્યાદિ વિકાર, તેણે સ્વાધીન કરી રાખ્યા હતા અને ખીજના
 મનોવિકારને સ્વાધીન કરવાની તેનામાં કળા હતી. આ સંધા
 ગુણો તેનામાં હતા તેથી અધિકાર ચલાવવાને તે યોગ્ય હતો, અને
 વળી અડચણના તથા ભયના સમયમાં વિશ્વાસ રાખવા લાયક તેને
 પોતાના ધંધામાં સારું જ્ઞાન હતું.

FIRST YEAR CLASS.

11th December.—From 11 to 2.

CHEMISTRY.

Professor GIRAUD.

1. What are the characteristic properties of an Acid and a Base ; and what kind of Salt do they form by their combination with each other ?

2. Give an example of the operation of “ Double Elective Affinity ” ; and explain it.

3. When a ray of Light falls upon a transparent object, in what several ways may it be disposed of ?

4. Explain the use, and the mode of action, of the Wet Bulb Thermometer.

5. State the conditions in which Oxygen exists in Nature. Explain how it may be prepared for experimental purposes. Describe its leading properties.

6. Explain the mode of action of the Electrical Machine.

12th December.—From 11 to 2.

LOGIC.

Professor HARKNESS.

1. What distinction does Whately draw between *abstraction* and *generalisation* ?

2. Exemplify the fallacy of the *undistributed middle* by actual arguments occurring in common conversation, or that you may have met with in books.

3. The advantage of using non-significant symbols ?

4. “ Every X is Y ; Z is not X ; therefore Z is not Y.” Is this a valid syllogism ? If not, why not ? Give a concrete example.

5. What are technically called *convertible* terms ? Convert

the following propositions :—" All equilateral triangles are equiangular" ; " All excess is hurtful."

6. According to Locke, in what respect are the rules of *Formal Logic* insufficient for the conduct of the understanding? The principal impediments to knowledge, and their proper remedies?

13th December.—From 11 to 2.

TRANSLATION.

Professor HARKNESS.

" In order to form sound opinions concerning characters and actions, two things are especially requisite—information and impartiality. But such as are most forward to decide unfavourably are commonly destitute of both : instead of possessing, or even requiring, full information, the grounds on which they proceed are frequently the most slight and frivolous. A tale, perhaps, which the idle have invented, the inquisitive have listened to, and the credulous have propagated,—or a real incident which rumour, in carrying it along, has exaggerated and disguised, supplies them with materials of confident assertion, and decisive judgment. From an action, they presently look into the heart, and infer the motive. This supposed motive they conclude to be the ruling principle ; and pronounce at once concerning the whole character.

" Nothing can be more contrary both to equity and to sound reason than such precipitate judgments. Any man, who attends to what passes within himself, may easily discern what a complicated system the human character is, and what a variety of circumstances must be taken into account in order to estimate it truly. No single instance of conduct whatever is sufficient to determine it. As from one worthy action it were credulity, not charity, to conclude a person to be free from all vice ; so from one which is censurable it is perfectly unjust to infer that the author of it is without conscience, and without merit. Did you know all the attending circumstances, it might appear in an excusable light ; nay, perhaps, under a commendable form."

13th December.—From 2 to 5.

TRANSLATION.

(Into English.)

नाविकविद्येच्या सिद्धांतांत व ते सिद्ध करण्यांत जें यास चागलें ज्ञान होतें त्यामुळे जी जी कल्पना याच्या मनांत येई तिचा फार वेळ आणि पुर्तेंपणीं विचार करून, व प्राचीन ग्रंथकारांचे तर्क आणि सूचना यांमध्ये व अर्वाचीन कालच्या नावाडीलोकांच्या प्रत्यक्ष पाहाण्या मध्ये विचारपूर्वक तारतम्य पाहून, शेवटीं कोलम्बसानें असा सिद्धांत केला कीं, आट्लान्तिक महासागरांतून नीट पश्चिमेकडे गलबत हाकारून गेलें असतां जे नवीन देश, फार विस्तीर्ण जो हिंदुस्थान देश त्यामध्ये असावेत असा संभव होतो, त्याचा निखालस शोध लागेल.

असा कोलम्बसानें नानाप्रकारचे व अनेक कारणांपासून उपस्थित झालेले असे जे नियम व प्रमाणें यांवरून जो हा सिद्धांत केला होता, तो जसा नवीन व लोकोत्तर तसाच दिसण्यांत असत्कल्पनेच्या दिसे. पृथ्वीची आकृति गोलरूप आहे असें तेव्हां ठाऊक होतें, व तिच्या आकृतीच्या मानाचा बऱ्याच शुद्ध रीतीने निर्णय केला होता, यावरून पाहतां उघड दिसून येतें कीं, युरोप, एशिया, आणि आफ्रिका हीं तीन खंडें त्याकाळीं जितकीं माहीत होतीं, तितकीं मिळून ही या भूगोलावरिल एक लाहानसा प्रदेश होईल. तस्मात् ज्या विस्तीर्ण प्रदेशाचा आपल्यास शोध लागला नाहीं त्यास अनुपयुक्त सागरानें अछादिलें नाहीं. तर मनुष्यास राहवयास योग्य असे देश त्या प्रदेशांत आहेत असें मानणें हें सृष्टिकर्त्याचें चातुर्य आणि लोकोपकार यांविषयींच्या आपल्या कल्पना त्यांस उचित आहे. या प्रमाणें असें हीं दिसूं लागलें, कीं भूगोलाच्या या बाजूवरील महाद्वीपांत जितकी जमीन आहे, तितकीच दुसऱ्या गोलार्धांत बहुत करून असावी. पृथ्वीची आकृति आणि रचना यांवरून दुसरें एक महाद्वीप आहे म्हणून जे हे निर्णय केले, त्यांचे अर्वाचीन काळीं गलबतांतून पर्यटन करणाऱ्या लोकांच्या प्रत्यक्ष अवलोकनावरून व तर्कांवरून दृढीकरण ही झालें होतें.

13th December.—From 2 to 5.

TRANSLATION.

(Into English.)

એ પુરુષની નૌકાશાસ્ત્રમાં તથા વાહાણો હંકારવામાં કુશળતાએ કરીને જે જે નવી કલ્પનાઓ તેને ઉત્પન્ન થયો, તે વિરો પોતાના મનમાં ઘણીવાર સુધી સારી પેઠે વિચાર કર્યા પછી, અર્ને પ્રાચીન લોકોના ગ્રંથોમાં જે સ્ત્રવનાઓ તથા કલ્પનાઓ લખેલી હતી તેને અર્વાચીન નાવિકોના અનુભવમાં જે કાંઈ આવ્યું તેની સાથે મેળવી જોયા પછી, અંતે તેનો નિશ્ચય થયો કે આરલાન્ટિક મહાસાગરમાં ઠેક પશ્ચિમ દિશાએ નવા દેશોનો શોધ લાગ્યા વિના રહેશે નહીં, અર્ને તે ધણું કરીને ભરતખંડ માંહેલા દેશો હશે.

જુદે જુદે ઠેકાણેથી તેને મૂલતત્વો તથા પ્રમાણો મળ્યાં હતાં તેણે કરીને જે મત નવું તથા વિલક્ષણ અર્ને દેખાવામાં અસંભાવ્ય હતું, તે મત સ્વિકારવાનું તેની જગતમાં આવ્યું. પૃથ્વીની આકૃતિ ગોલ છે, એ વાત તે સમયમાં માલુમ હતી, અર્ને તેના મહત્વવિરોધ ધણું કરીને કાંઈક ખરો નિશ્ચય થયો હતો. યૂરોપ, એરિઆ, અર્ને આફ્રિકા એ ખંડો માંહેલા જે દેશો, તે સમય માલુમ હતા, તે સર્વ આખી પૃથ્વીનો માત્ર એક ન્હાનો ભાગ છે એવું આ ઉપરથી સાફ માલુમ પડ્યું. પૃથ્વીના જે હોટા ભાગનો અઘાપિ શોધ લાગ્યો ન હતો, તે ભાગમાં નિરુપયોગી સમુદ્રને બદલે મનુષ્યને રહેવા લાયક પ્રદેશ હશે, એવી કલ્પના, જગતનો કરનાર જે પરમેશ્વર તેની ચતુરાઈ અર્ને ઉદારપણા વિરો મનુષ્યોનું જે જ્ઞાન તેને અનુસરતી હતી. પૂર્વ મહાદ્વીપમાં જેટલી જમીન છે તેટલીજ જમીન પશ્ચિમ મહાદ્વીપમાં હશે, એ વાત સંભાવ્ય દિસવા લાગી. પૃથ્વીની આકૃતિ અર્ને મહત્વ ઉપરથી ખીજો મહાદ્વીપ છે, એ વિરો જે અનુમાન થયું હતું, તેને અર્વાચીન નાવિકોની સ્ત્રવનાથી અર્ને તેમની કલ્પનાથી ઘણી પ્રુટિ મળી.

14th December.—From 11 to 2.

I.—HISTORY.

Professor SINCLAIR.

1. The concurrence of several great events prepared a change sufficient to justify the division of Modern European History from that of the Middle Ages or of Antiquity?

2. Give an account, from Heeren and Murray, of the origin of the Colonial establishments.

3. The Political view of the Reformation from its origin to the religious peace at Augsburg, as given by Professor Heeren.

II.—GEOGRAPHY.

1. *a.* State the properties of the Air on which depends, and give an account of, the production of Winds in general.

b. As a general rule, the *South-west* Monsoon prevails north of the Equator, and the *South-east* south of the Equator, from April to October, but from October to April the *North-west* blows south of the Equator, and *North-east* in the northern hemisphere. Explain these facts on physical grounds.

c. The formation of Rain? The progress of the rainy season through India?

2. "The Moon by her attraction raises the waters of the ocean under her, and at the same time they are elevated at the opposite side of the earth."

a. State clearly, to *how much* of the Moon's attractive power (the Sun being neglected) the *elevation* of the waters under her is due; and what is the real account of the contemporaneous elevation at the opposite side.

b. Hence, also, the attraction of the Sun and Moon is felt most at the Equator, and the height of the Tides diminishes in receding from it?

3. *a.* The causes which have combined to make Great Britain so pre-eminently distinguished by her industry and progress in the Arts?
 - b.* State the most important of her mineral products and of her Manufactures?
 - c.* Agriculture is the most important of all branches of Industry; why?
 - d.* State some of the rotations adopted by scientific cultivators.
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15th December.—From 11 to 2.

MATHEMATICS AND PHYSICS.

Professor DADABHAI NAOROJI.

1. Two sides and the contained angle of a spherical triangle being given, determine the spherical excess.
2. What is the declination of the Sun, when he is on the horizons of Bombay and Madras at the same instant; their respective latitudes being $18^{\circ} 56' N.$, and $13^{\circ} 5' N.$; and their longitudes $72^{\circ} 57' E.$, and $80^{\circ} 21' E.$?
3. The sum of the series

$$\sin A + \sin 2A + \sin 3A + \dots + \sin nA?$$
4. Sturm's Theorem?
5. Solution of Quadratic Equations by continuous approximation?
6. Construction and principle of the Sextant?
7. A given force (a) is resolved into two forces, acting at a given angle; determine the locus of the extremity of either component in terms of the given force and angle.
8. A body (w) is kept at rest on a plane, whose inclination is α , by friction (the coefficient of friction being given), and a force acting in a given direction: compare the force and the weight of the body.

15th December.—From 11 to 2.

POLITICAL ECONOMY.

Professor SINCLAIR.

1. *a.* Define the Science of Political Economy.
b. State Mr. Senior's definitions of Wealth.
2. State the four elementary propositions of the Science given by Mr. Senior.
3. *a.* The primary and secondary requisites of Production?
b. The various modes mentioned by Mr. J. S. Mill, in which Labour is employed as an agent of production?
c. The fundamental propositions respecting Capital, as given by the same economist?
4. State the Conditions of Value, and illustrate them.
5. *a.* Commodities are frequently divided into three classes, according to their difficulty of attainment?
b. State the Laws of Value for each of these classes.
c. The third class is a source of very important consequences.
6. State and illustrate the ultimate analysis of Cost of Production.

SECOND YEAR CLASS.

4th December.—From 11 to 2.

TRANSLATION.

Professor HARKNESS.

(Translate into your Vernacular.)

"Industry is not only the instrument of improvement, but the foundation of pleasure. Nothing is so opposite to the true enjoyment of life as the relaxed and feeble state of an indolent mind. He who is a stranger to industry may possess, but he cannot enjoy. For it is labour only which gives the relish to

pleasure. It is the appointed vehicle of every good to man. It is the indispensable condition of our possessing a sound mind in a sound body. Sloth is so inconsistent with both, that it is hard to determine whether it be a greater foe to virtue, or to health and happiness. Inactive as it is in itself, its effects are fatally powerful ; though it appear a slowly flowing stream, yet it undermines all that is stable and flourishing. It not only saps the foundation of every virtue, but pours upon you a deluge of crimes and evils. It is like water, which first putrefies by stagnation, and then sends up noxious vapours, and fills the atmosphere with death."

4th December.—From 2 to 5.

TRANSLATION.

(Into English.)

या ठिकाणी ज्या गोष्टीचें यानें वर्तमान ऐकिलें त्या गोष्टीप्रमाणें दुसरी कोणतीही गोष्ट घातक झाली नसती. या गोष्टीमुळें याच्या सर्व दुर्दैवांची परिपूर्णता झाली. ती गोष्ट ही कीं जिची नीति, दया, व कृपा यांजवर कोलम्बसाचा परिणामीचा आश्रय होता अशी जी याची आश्रयदाती इसाबेल्डा राणी ती मरण पावली. ज्यानें बहुत काळ पर्यंत कोलम्बसाच्या विरुद्ध वागून यास बहुत दुःखें दिलीं, असा जो फेर्दिनान्द त्यावांचून, सांप्रत कोलम्बसाचें दुःख विमोचन करणारा, व यानें पुष्कळ संकटें भोगून जीं कामें बजाविलीं त्यांबद्दल बक्षीस देणारा दुसरा कोणी राहिला नव्हता. तर ज्या राजाचा मनांत कोलम्बसाविषयीं विपरीत विचार भरून गेले होते त्यास विनंती करण्याचें काम त्रासदायक व निष्फळ असें होतें, तथापि अशा कृत्यांत कोलम्बसास आपले आयुष्याचे दिवस घालवणें प्राप्त पडलें. याची प्रकृति थोडीशी पूर्वस्थितीवर येतांच हा दरबारांत गेला, आणि याची जरी तादृश यथा योग्य सौजन्यानें भेट घेतली नाहीं तरी यानें लागोपाठ अर्ज्यां करून याजवर ज्यांनीं जुलूम केला होता त्यांचें पारिपत्य करण्या करितां व १४९२त जो करारनामा केला होता त्यांत लिहिलेले सर्व अधिकार

परत देण्याकरितां, हक्काच्या मागण्या मागितल्या. फेर्दिनान्द यानें गोड गोड शब्द बोलून व ज्यांत काहीं अर्थ नाहीं अशीं वचनें देऊन कोलम्बसास नाद लाविला. फेर्दिनान्द यानें याच्या ज्या सत्तेच्या मागण्या होत्या त्या बाहाल न करितां त्यांची उडवा उडव करावी म्हणून त्यानें नाना प्रकारच्या युक्ति सांगून तें कृत्य अशा डावानें लांबणीवर घातलें कीं तेणेकरून त्याची फेर्दिनान्द याच्या मनांतून समाप्ति करावयाची नाहीं असें उघड दिसून आलें. कोलम्बसाची शरीरप्रकृति क्षीण झाल्यामुळे सदोदित विनंति करणाऱ्या अर्जदारापासून लवकर मुक्त होण्याची आशा दिसून, फेर्दिनान्द यास फार चांगलें वाटून, आपला अयोग्य मार्ग आचरण्या विषयीं उत्तेजन आलें. फेर्दिनान्द यानें जी ही आशा धरिली होती तींत तो फसलाही नाहीं. ज्या राजाची अशा विश्वासानें आणि सिद्धीनें चाकरी केली त्याच्या कृतघ्नतेमुळे संतापून, व यानें जे श्रम आणि संकटें भोगिलीं होती तींहींकरून अगदीं जर्जर होऊन, आणि या सर्व गोष्टींमुळे जी अशक्ति याच्या आंगांत आली होती तिणेंकरून अगदीं थकून जाऊन, १५०६त मे महिन्याच्या २८ व्या तारिखेस वालाडोली एथें यानें आपला देह ठेविला. यासमयीं यास ५९ एकुणसाठ वर्षे होती. कोलम्बसानें मरणसमयीं आपली अब्रू ज्या महात्मतेनें प्रसिद्ध झाली होती त्या महात्मतेस उचित अशी अंतःकरणाची स्वस्थता राखिली; व आपल्या आयुष्यांत हर एक प्रसंगां जी धर्मविषयक अतिशय मान्यता यानें दर्शित केली होती तीस योग्य अशी जी धर्मपरायण बुद्धि तिचे विचार मनांत बाळगले.

4th December.—From 2 to 5.

TRANSLATION.

(Into English.)

“पोतानी भुरग्यानी जे धर्मापेक्षा तेनां न्याय, दया, अनें कृपा उपर झाल्यस छेल्ती आशा राखीने जेठो हतो, परंतु आ ठेकाणु तेणु

રાણીના માતની ખબર સાંભળી તેથી તેને આસમયે જોઈલું દુઃખ થયું તેટલું ખીજ કોઈ કારણથી થયું ન હતું, અને એ ખર્નાવથી તેના સંકટની પરાકાષ્ઠા થઈ. ફેર્દિનાન્દ જોણે ધણી એક વેળા કોલમ્પસની સામે થઈને તેને દુઃખ દીધું હતું તે સિવાય કોલમ્પસના દુઃખની દાદ સાંભળનાર અથવા તેની આકરીનો તથા સંકટનો બદલો આપનાર હવે કોઈરહ્યું નહીં. જે રાજા કોલમ્પસને વિરૂદ્ધ હતો તેની વિનંતી કરવામાં તેને આશા ન હતી તથા એ વાત તેને ગમતી પણ ન હતી. પરંતુ પોતાની ઉમરના આખરના દિવસ કાલાવાલા કરવામાં ગુજરવાનું તેના નસીબમાં હતું. તેની પ્રકૃતિ કંઈક સારી થતાંજ તે દરબારમાં ગયો, અને ત્યાંહાં યોગ્યતા પ્રમાણે તેને માન મળ્યું નહીં, તો પણ પોતાને દુઃખ દેનારા પુરુષોને શિક્ષા કરાવવા માટે, અને ઇસવી સન ૧૪૯૨ ના કરારનામાની રૂએ સર્વહક્ક પાછા મેળવવા માટે, તેણે વારંધડીએ ફેર્દિનાન્દ રાજાને ઉપરા ઉપરી અરજીઓ કીધી, તોપણ આ રાજાએ તેની સાથે મીઠું મીઠું બોલીને અને જુઠા વાયદા કરીને ઉડાડ્યા કીધો. તેનું માગણું ન આપતાં તેની વાત ઉડાવવાની ચુકતીઓ કીધી, અને આ કામમાં એવી પ્રસિદ્ધ રીતે લુઆઈ કરી, કે તેથી સાફ માલુમ પડ્યું કે એના દાવાનો ફેસલા કદાપિ પૂરો કરવાનો બાદશાહનો ઇરાદો નથી ; કોલમ્પસનું શરીર દાહોડે દાહોડે ધસાતું ગયું, તેથી ફેર્દિનાન્દને એવી આશા થઈ કે હવે આ તકાળે કરનાર દાવાદારથી આપણુ જલદી છુટા થઈશું, અને આ પ્રપંચ જારી રાખવાને તેને ઉત્તેજન મળ્યું. ફેર્દિનાન્દની આશા પૂર્ણ થઈ જે રાજાની તેણે પ્રમાણિકપણાથી અને યશસ્વી રીતે આકરી કરી હતી તેની કૃતગ્રતાથી કંટાળીને, અને મહેનત તથા મુસીબત જે તેને પડી હતી તેથી ધણોજ અશક્ત થઈ જઈને કોલમ્પસ એણે ઇસવી સન ૧૫૦૬ ના મે મહિનાની વીસમી તારીખે વાલાદોલીદમાં દેહ મુકી. તે વખતે તેનું વય અઠાવન વર્ષનું હતું. જે મનઃ પ્રૌઢતાથી તે પ્રખ્યાત થયો હતો તેને રોબે એવી મનની સ્વસ્થતાથી અને હરેક પ્રસંગે ધર્મ ઉપર જે તેણે આસ્થા બતાવી હતી તેને યોગ્ય ભક્તિથી કોલમ્પસ મેરણ પામ્યો.”

5th December.—From 11 to 2.

MATHEMATICS AND NATURAL PHILOSOPHY.

Professor SINCLAIR.

1. *a.* The locus of a point such that its distance from a fixed point may be in a constant ratio (e) to its distance from a fixed line ?
b. The value of e determines the kind of the locus ; demonstrate the several cases fully ?
2. The orbit of a body, acted on by a central force varying inversely as the square of the distance, may be expressed by $\frac{h^2}{p^2} = \frac{2\mu}{r} - \frac{2\mu}{R} + V^2$, in which r is the radius from the centre of force, and p the perpendicular from the same point to the tangent to the orbit at the extremity of r ; h , μ , R , and V being constants. Prove, geometrically or algebraically, that the orbit is—
a, an Ellipse, with focus in the centre of force ;
b, a Parabola, with ditto ditto ;
c, an Hyperbola, with ditto ditto ;
 according as *certain* relations subsist between the constants μ , R , V ?
3. *a.* Equation of the involute of the circle ?
b. Instances of, and reasons for, the employment of this involute in machinery ?
4. *a.* A solid immersed in a fluid sustains an upward pressure ; why, and how much ?
b. Yet a body specifically lighter than a fluid may be kept at the bottom of the vessel by the pressure of the fluid ; under what conditions ?
5. *a.* The more important parts of the Railway Locomotive Engine ?
b. The functions necessary to the management of the Engine ?

6th December.—From 11 to 2.

CHEMISTRY.

Professor GIRAUD.

1. What is Lime? In what conditions is it found in Nature? State its leading properties and uses.
2. State the Law of Equivalent Composition : illustrate it by an example ; and explain it on the Atomic Hypothesis.
3. What are the necessary elements of a simple Voltaic Circle ; and what are the chemical and electrical conditions of these elements when the circle is completed ?
4. Explain the action of an ordinary Galvanometer.
5. How is the Carbonate of Soda manufactured from Common Salt ?
- 6 Explain the phenomena that occur when a Leyden Jar is charged and discharged.

7th December.—From 11 to 2.

I. HISTORY.

Professor SINCLAIR.

1. *a.* The Age of Louis XIV. may be characterized from the prevalence of a certain System? Its formation, and maxims?
- b.* The consequences which the application of these maxims had upon the mutual relations of the States could not but be highly injurious, both in peace and war?
- c.* With this character of the Age, another was in a peculiar manner combined, and why?
2. Brief History of the Colonial affairs, from 1661 to 1700—
 - a.* Of the French ?
 - b.* Of the English ?
 - c.* Of the Dutch ?
3. *a.* Clive's career in India may be divided into three parts ; of which give a brief description, and the most important results ?

- b.* The position of England among the European States
• at the period of his first visit ?
- c.* Dwell, at some length, on the political and social
benefits produced by the reforms of his last
sojourn ?

II. GEOGRAPHY.

1. *a.* The Earth, considered as a planet, consists of three
distinct, but not unrelated, parts ?
- b.* Area of the Earth's surface ? In what proportions,
and where, are the land and water severally
distributed ? Pole of the land hemisphere ? This
indicates, in some degree, where the origin of the
tides and ocean currents should be looked for ?
2. *a.* Of the Antarctic Drift Current : the cause, course
and divisions, and the various names it receives,
and its connection with navigation ? The differ-
ence of temperature of the sea at certain sides of
the Galapagos Islands is sometimes remarkable,
and the cause ?
- b.* Of the Equatorial Current of the Pacific ; the cause,
and direction and velocity, and its southern and
northern limits ? Position of the North Equa-
torial counter current ?
3. *a.* Instances of the services of the Trade Winds to com-
merce ? Their causes ? The Monsoons are modi-
fications of them ?
- b.* Comprehension of the term Climate, as understood
by Humboldt ? Enumerate the chief causes which
determine physical climate ?
- c.* The *isothermal* and *isochimenal* curves deviate much
more from the parallels of latitude than the
isothermal. The meaning of these terms, and
the physical explanation of the fact ?

8th December.—From 11 to 2.

MENTAL PHILOSOPHY.

Professor HARKNESS.

1. Cousin's classification of philosophical questions? His determination of the order in which they should be treated?
 2. The method which Locke proposes to pursue in the *Essay on the Human Understanding*? Its merit, and its fault, according to Cousin?
 3. What does Locke term *simple*, and what *complex* ideas? How are the latter deduced from the former?
 4. The idea of pure space how obtained, according to Locke? Cousin's criticism of this doctrine, and his distinction between the logical and the chronological order of ideas?
 5. Why, according to Locke, is thought or feeling not essential to the existence of mind?
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9th December.—From 11 to 2.

POLITICAL ECONOMY.

Professor SINCLAIR.

1. *a.* The functions of Money, and illustrate their importance?
b. The commodities best fitted for these purposes, and why so?
2. *a.* Value of Money, an ambiguous expression? And an erroneous theory connected with this confusion of language?
b. State, as fully as you can, on what the Value of Money depends?
3. *a.* Objections to a double standard of value?
b. The employment of gold and silver as money in England how regulated, so as to avoid these objections?
4. *a.* Give a satisfactory refutation of the theory of a general over-supply.

b. The origin of this notion, as traced by Mr. J. S. Mill ?

5. Interchange of commodities between distant places is determined by *certain* differences in their cost of production (Ricardo) ? Illustrate the theory by an example ?

6. a. The direct benefits of Commerce wherein consist ?

b. Its indirect benefits are still more important ?

THIRD AND FOURTH YEAR CLASS.

11th December.—From 11 to 2.

POLITICAL ECONOMY.

Professor FRASER.

1. State the distinction between the necessary and optional functions of Government ; and show that the former cannot be limited to the affording of protection against force and fraud.

2. State Adam Smith's fundamental maxims relating to the qualities desirable in a system of taxation ; and illustrate the first, or explain on what grounds equality should be the rule in taxation.

3. What, according to Hancock, is the most simple and natural tax, as conforming to all these maxims of Smith ; and what are the points to be determined in order to frame it ?

4. Explain why this most simple and natural tax has not been more generally adopted ?

5. State the theory of price, according to Hancock, and explain the method by which Political Economists account for the two distinct classes of variations in prices.

6. Explain, according to Mill, how the purchasing power of money depends, in the first instance, on demand and supply, and ultimately, on the cost of its production.

7. Examine (in its two forms, or with reference to the two elements of demand) the doctrine of an over-supply of all commodities above demand ; give the true explanation of the two

economical facts which have given occasion to the notion of general over-supply.

12th December.—From 11 to 2.

MATHEMATICS AND PHYSICS.

Professor SINCLAIR.

1. *a.* Prove Lagrange's theorem for the expansion of $F(z)$ in powers of x , where $z = y + xf(z)$.

- b.* Hence develope the n th power of the focal radius vector of an ellipse $\left(r = a \cdot \frac{1 - e^2}{1 + e \cos \omega} \right)$ in powers of $\cos \omega$.

2. *a.* Prove the radius of curvature of an ellipse is

$$\rho = a \cdot \frac{1 - e^2}{(1 - e^2 \sin^2 \lambda)^{\frac{3}{2}}}, \lambda \text{ being the angle between}$$

the normal and the major axis.

- b.* Hence derive the eccentricity of the Earth (assumed to be an ellipsoid of revolution), the lengths of a degree of the meridian at two different latitudes, and the corresponding λ, λ' , being known.

- c.* And hence find the lengths of the equatorial and polar radii.

3. Find the value of $\int \frac{dx}{x^4(a + b x^2)}$.

4. Derive the six equations which are necessary and sufficient for the equilibrium of a free system.

5. A simple geometrical method of compounding pairs of equal and opposite parallel forces acting in any planes?

6. Find the centre of a system of parallel forces in terms of the moments of the forces with respect to three rectangular planes.

7. General description of Volcanic phenomena, and the Volcanic districts of Asia?

8. State distinctly the cause of the Tides, and the progress and some other phenomena of the Tide-Wave?

13th December.—From 11 to 2.

BOTANY.

Professor GIRAUD.

1. Trace the analogies between the development of a Leaf-bud and the growth of an Embryo.

2. What are the several systems of Vessels in Plants? What the structure of these Vessels, and their functions?

3. From what Binary Constituents of the Air and of the Soil do plants derive the materials for the growth of their tissues, and the formation of their secretions? Describe the mode in which Plants assimilate these materials.

4. In Natural History Sciences we may have two distinct methods of Classification: how do these differ from each other in their nature and objects?

5. Explain the necessity for a "Rotation of Crops"; and how "Guano," used as a manure, may obviate this necessity, as regards the "Cerealia."

14th December.—From 11 to 2.

MORAL PHILOSOPHY.

Professor HARKNESS.

1 The coincidence of Benevolence, and Self-love, as regards the promotion of human happiness?

2. How does Butler establish the superior authority of Conscience; and arrive at the conclusion that Man, "from his make, constitution, or nature, is, in the strict sense, a law to himself"?

3. Show the ultimate coincidence of Conscience and reasonable Self-love.

4. The principal heads of the argument for a future state, derived: (a) From the nature of mind; (b) From the constitution of Man, and the circumstances in which he is placed?

5. Stewart mentions a *fact*, which must be admitted, and an *inference*, which may be consequentially drawn from it, even according to the scheme of absolute Atheism?

15th December.—From 11 to 2.

INDUCTION.

Professor SINCLAIR.

1. State the importance of Inductive Logic.
2. *a.* Bacon's First Aphorism ?
b. It contains the essence of Induction as conceived by Whewell ?
c. And the Ground of Induction as stated by Mill, Stewart, and earlier philosophers ?
d. An erroneous limitation respecting this Ground is corrected by Bailey ?
3. Those who had treated the Sciences up to Bacon's time, went into opposite extremes. His apt illustration of their functions severally, and that of the correct investigator of Nature ?
4. *a.* Laws of Nature ? Explain the meaning of "the general regularity in Nature," and illustrate it ?
b. Meaning of, and the attributes or characteristics of, a Cause ; and Mill's reasons (against Comte) for retaining the term ?
5. *a.* Mill's Four Methods of Experimental Inquiry ? Source of a characteristic imperfection of the Method of Agreement ?
b. The stages of the Deductive Method ?
6. *a.* The various modes of the explanation of Laws of Nature ?
b. Limit to this explanation assigned by Mill, which differs from two opposite extremes ?
7. *a.* The proper use of scientific hypotheses ?
b. Legitimate, how distinguished from illegitimate hypotheses ? and instances of each kind in illustration ?

16th December.—From 11 to 2.

LITERATURE.

Professor HARKNESS.

[N.B.—Where no distinct question is proposed, explain the words or passages printed in *Italics*.]

OTHELLO.

1. *Iago*.—" *In following him I follow but myself ;
Heaven is my judge, not I for love and duty,
But seeming so for my peculiar end :
For when my outward action doth demonstrate
The native act and figure of my heart
In complement extern, 'tis not long after
But I will wear my heart upon my sleeve
For daws to peck at : I am not what I am.*"

The peculiar end here alluded to ? Point out and define clearly the logical subject and predicate in the last sentence.

2. *Brab.*—" What tell'st thou me of robbing ? *this is Venice ;
My house is not a grange.*"

The nature of the distinction here indicated ?

3. *Oth.*—" * * * which I observing,
*Took once a pliant hour ; and found good means
To draw from her a prayer of earnest heart,
That I would all my pilgrimage dilate,
Whereof by parcels she had something heard
But not intentively : I did consent ;
And often did beguile her of her tears
When I did speak of some distressful stroke
That my youth suffered.*"

The emotion alluded to in the last sentence, and its tendency to advance his suit ? Can you quote a passage to this effect from any other English poet ?

4. " *Upon this hint I spake ;
She loved me for the dangers I had passed,
And I loved her that she did pity them.*"

The name, nature, and use of the emotion which was the principle of mutual attraction in this case ?

5. *Iago*.—" *Who steals my purse steals trash ; 'tis something, nothing ;
'Twas mine, 'tis his, and has been slave to thousands ;
But he that filches from me my good name,
Robs me of that which not enriches him,
And makes me poor indeed.*"
6. *Oth*.—" Put out the *light*, and then put out *the light*.
If I quench thee, thou flaming minister,
I can thy former light restore,
Should I repent me : *but once put out thine,
Thou cunning'st pattern of excelling nature,
I know not where is that Promethean heat,
That can thy light relume :*"

Explain the Mythological allusion.

7. Give a sketch of the characters of the Moor, Iago, and Desdemona.

FOURTH YEAR CLASS.

8th December.—From 11 to 2.

PHYSICS.

Professor SINCLAIR.

1. The force of attraction varying inversely as the square of the distance, find—
 - a. The attraction of a homogeneous sphere, on a particle without it ?
 - b. The attraction of a heterogeneous sphere, composed however of homogeneous concentric shells, on a particle without it ?
 - c. Attraction of a homogeneous spherical shell on a particle *within* it ?
2.
 - a. The Statical and Dynamical measures of Force ?
 - b. The differential equations of Motion ?

- c. Derive the differential equation of the equilibrium of
• a fluid ?
3. The weights P and Q act in opposite directions, P descending, by cords on a wheel and axle, originally at rest, whose radii are a and b ; (neglecting the weight of the wheel and axle and cords, friction, and atmospheric resistance,) deduce—
- The accelerating force at the unit of distance from the axis ?
 - The velocity of P at any instant in terms of the angle (θ) described from the beginning of the motion ?
 - The time required to raise Q a given height h ?
4. a. Of a free body acted on by any forces, the spontaneous axis of rotation will have a minimum moment of inertia ?
- Knowing the moment of inertia of a body round an axis passing through its centre of gravity, required the moment round a parallel axis at a given distance ?
5. a. Prove Clairaut's Theorem, that
- $$F = E \left\{ 1 + \left(\frac{5m}{2} - \epsilon \right) \sin^2 \lambda \right\} ;$$
- m being the ratio of the centrifugal force at the equator to the equatorial gravity E , F the gravity at the latitude λ , and ϵ the ellipticity ?
- Hence, the change in the length of the seconds pendulum (vibrating in vacuo) varies as the change in the square of the sine of the latitude ?
 - And prove the first approximate equation for the pendulum ?
6. a. Aberration of light ? And the Constant of aberration adopted by Mr. Baily ?
- The effect of aberration on the apparent positions of a star throughout the year ?
 - Annual parallax ?

9th December.—From 11 to 2.

MORAL PHILOSOPHY.

Professor FRASER.

1. What are the two questions to be considered in treating of the principles of Morals? What considerations enter into the first, and what into the second?

2. What are the three classes to which the different accounts that have been given of the nature of Virtue may be reduced?

3. To which of these classes does Plato belong; and what account does he give of the nature of virtue?

4. What view did the Stoics take of the nature of virtue?

5. Of what system was Dr. Hutcheson the ablest expounder, and what view did he give of the nature of virtue?

6. With reference to the second question to be considered in treating of the principles of Morals, what are the two classes into which those systems which make sentiment the principle of approbation may be divided?

7. To which of these classes does Smith's system belong? Give a general view of his system? What error does Dr. Brown point out in it?

APPENDIX E.

SELECTED ANSWERS.



LOGIC.

FIRST YEAR STUDENTS.

1. When we draw off and contemplate separately any part of an object presented to the mind, disregarding the rest of it, we are said to abstract that part, as a man may make the scent of a rose the subject of his thought, disregarding its colour, form, &c. A person may take into consideration the light of the sun independently of its place in the sky, or its magnitude, &c. In abstraction, we retain in our mind all the circumstances of character, place, time, as well as the idea of unity of the object or person in our mind, though we make one of these to be the subject of our thought ; while in generalisation, which I have to explain, we have only an imperfect view of an individual or object. When, in contemplating several objects, and finding that they agree in certain points, we take into our minds only the points in which they agree, and disregard every other, and give to each and all, a name common to them all in the points they all agree with one another, we are said to generalise, and the term so applied is called a common term. By generalisation we either get a term denoting the individuals, which is then said to be a concrete common term, or a term denoting the circumstance in which individuals or objects are alike, which is called an abstract common term. Concrete denotes form and matter,

while abstract only the form. We thus see that generalisation cannot be effected without abstraction, though we can abstract without the process of generalisation. From Socrates we come by generalisation (though first by abstraction) to the term Philosopher; from philosopher, to the common term Man; and from this we come to the more general term Animal. By generalisation we do not come to employ a particular common term, but a term denoting a class we choose to intend—as, Building can be placed in the class of stone buildings, or in that of Commodities, if it is intended to be sold. Abstraction, and then generalisation, are necessary in the process of reasoning; for in a syllogism we should have a common term, and a term cannot be said [to be] common unless it is deduced by generalisation. Common term, also called sign or representative of a class of things for which it stands, furnishes us with only an inadequate view of an individual, for it gives only that part of an object which is alike to the parts of all the objects.

NARMADASHANKAR LALSHANKAR.

2. The examples of the fallacy of the undistributed middle term are as follows:—“A man who is indifferent to all religion is one who does not seek to force his religion on others: this man does not seek to force his religion on others; therefore he is indifferent to all religion.” “Testimony is a kind of evidence more likely to be false than a miracle to be true: the evidence on which the Christian miracles were believed was testimony, therefore the evidence on which the Christian miracles were believed is more likely to be false, than a miracle to be true.” These examples, if we put symbols for words that have meaning, become, x is y ; z is y : therefore z is x ; in which we see the middle term y is undistributed in both premises.

3. The advantage of using non-significant symbols for the terms that occur in a syllogism is, that the validity or invalidity of the reasoning becomes evident, according as the abstract form in which we put it agrees or not with the dictum. When an argument is expressed in many words, as in the examples I have given in answer to question 2, it is often difficult to understand

its soundness or unsoundness ; which difficulty is at once got over by substituting non-significant symbols, as x , y , z , &c. for the terms that occur in it.

RAMKRISHNA GOPAL.

4. The syllogism "Every x is y : z is not x ; therefore z is not y ," is not valid, because, though the middle term x is distributed in both the premises, being in the first premise the subject of a universal proposition, and in the second the predicate of a negative proposition, yet the term y , which is undistributed in the premise, is distributed in the conclusion, being in the first the predicate of an affirmative proposition ; so that in reality we take a term more extensive in its signification in the conclusion than what is allowed in the premise, which is equivalent to introducing an additional term. Now let us take a concrete example. If I say—every tree is a vegetable : grass is not a tree ; therefore it is not a vegetable ; the syllogism is invalid ; the reasoning, in this case, being the same as that given in the abstract form.

JAVERILAL UMIASHANKAR.

5. Terms which are equivalent to one another, in other words [which] are of equal extent, are technically called *convertible* terms ; as, when we say man is rational, the term *rational*, we know, is of equal extent with man, because it cannot be affirmed of anything else. The propositions—"All equilateral triangles are equiangular," "All excess is hurtful," can be converted as follows : "Some at least equiangular triangles are equilateral," "Some hurtful things at least are carried to excess."

6. Logic only professes to explain the principles on which reasoning proceeds, and enables us to conduct the reasoning process rightly. If, therefore, the premises we start from be true, our reasoning, if logically conducted, will give us a true conclusion. Therefore, in order that we should arrive at true conclusions, we must always start from true premises : which, however, can hardly be expected to be always the case, since we are liable to assume prejudices, to view only one side of a question, are guided by our interest, and so forth. In short,

Logic cannot reach the real performances of our nature. To conduct our understanding, therefore, we require some other rules besides those given by Logic.

Locke gives three miscarriages that men commit with respect to their reason, which hinder them in their progress towards knowledge. The *first* is of those who do not reason at all, but do and think according to the example of others. ,

The *second* is of those who allow their passions and interest to influence their judgment.

The *third* is, that we are not able to take in all sides of a question. We are all short-sighted, and view only one side of a matter, and therefore the judgment we would give with regard to it will not be true. The worst form which this misconduct of men assumes, is of supposing that what we have learnt or read is true, everything else is wrong. To provide against coming to such rash conclusions as these, we should collect and take in arguments *pro* and *con*, before we proceed to any conclusion.

All our misconduct with regard to our mind arises from want of a due improvement of its powers; we should, therefore, practise ourselves to reason, and otherwise improve our mind.

We should always have determined ideas of things, and should settle the signification of the words we employ to designate them.

Some men are governed by principles which are not self-evident, nor are true; such as this—"The founders or leaders of any party are good, and therefore their tenets are true." Such principles are taken by men without examining the grounds on which they stand, and this they do, because they are not able to reason through a long chain of consequences to remote principles. They should therefore accustom themselves to such a kind of reasoning; and Locke recommends the study of mathematics as calculated to create such a habit in them.

All men are governed by prejudices which hinder them in their progress towards knowledge. This is a very great impediment to our progress in knowledge, against which Locke proposes the following remedies.

We should not be in love with any opinion, or wish it to be true, until we know it to be so. We should always examine the principles which we take, and see how far we can safely rely on them.

Some men do not make observations upon particular matters of fact, which hinders them from getting knowledge, the foundations of which are particular facts. Opposite to these are those who draw general conclusions from every fact they see or read. These extremes ought to be avoided. Locke says, that we should take hints from particular facts, and carry them in our minds, to be judged of, by what we shall find in history to confirm or refute them.

Some men hunt after arguments that would favor their doctrines, which is misguiding their understanding wilfully. We should always try to find arguments *pro* and *con*.

We should not deal hastily with any subject in hand.

In order that we should accustom ourselves to all sorts of reasoning, and that we should not erect our opinions upon single view, we should get knowledge in all the sciences. We should resolve every principle we meet with in books to the grounds on which it stands. Such a habit of examining what books advance, is useful in our progress towards knowledge.

These are the principal miscarriages of men with reference to their understanding, with their proper remedies, as given by Locke.

RAMKRISHNA GOPAL.

MENTAL PHILOSOPHY.

SECOND YEAR STUDENTS.

1. Philosophical questions, according to Cousin, may be divided into two classes, embracing all the questions, general and particular; all those that present themselves immediately, and all those that are to be sought for in the depths of science; all that are known and are possible. According to him (Cousin) philosophy is the science of human nature, considered in the facts that offer themselves to our observation. Amongst these

there are those that refer more particularly to the intelligence, and are called *Metaphysical*. Metaphysical questions, when reduced to general formulas, constitute intellectual principles. Metaphysics is therefore the science of the intelligence in that of the intellectual principles. Intellectual principles are divided into two classes, those referring to the intelligence in which they exist, to the subject that possesses them, to the reflection and consciousness that exercises and contemplates them, and those which relate to outward objects, not as in themselves or in ourselves, but in their consequences and external applications. The human mind has regard, not only to the subject, but also to the external world. Philosophical questions are therefore divided into *subjective* and *objective*. These embrace all the thoughts, all perceptions, all sensations, all ideas, which we have or can have.

The subjective problems are divided into problems concerning the actual, the primitive state of our cognitions, and those regarding the passage from the primitive to the actual. The objective problems are divided into logical, and metaphysical problems; problems regarding the absolute and the external existences, and the particular existences.

Philosophical questions being classified into *subjective* and *objective*, it remains to satisfy the second law of philosophical classification, viz. to determine the order in which they ought to be treated. Evidently the subjective problems ought to be treated before the objective. Though they may be presented to us at one and the same time, yet the subject, the thinking subject, must have precedence. It is only *in* and *through* the mind that we derive all our knowledge of the external world; and the knowledge of the subject, therefore, is essential to the acquisition of all objective problems.

But the subjective problems present themselves under different aspects. We may inquire into the phenomena of consciousness, as they are actually present in the understanding; or we may begin with the inquiry as to their origin. The true method must begin with the inquiry into the actual characteristics of our cognition without any systematic prejudice, and then investigate

their origin, and trace their genesis. For to begin with the primitive is to begin with one of the most difficult, obscure, and embarrassing questions, without any light and guide. Besides, by so doing, the hypothesis we may propose to explain their origin may be false, and we will then arrive at a false actual, and the relation between the actual and the primitive will be the relation between two hypotheses. The subjective problem will then be falsified. What then becomes of the objective? Our knowledge will be all perverted. Whereas to begin with the actual is to begin with one of the most simple problems, and when we have determined the actual characteristics of our cognitions in the developed state, we may safely inquire into their origin, and trace the path by which they have arrived at the present state.

In regard to the objective problems which should follow the subjective, *logical problems*, problems regarding the *absolute* and external existences, should be treated before the metaphysical, regarding particular existences; for the solution of the former is the principle of the latter. Thus the order in which philosophical problems ought to be treated is, first, the subjective before the objective, and of the subjective, the actual before the primitive; then the objective; and of them, the logical before the metaphysical.

2. The method which Locke proposes to pursue in the *Essay on the Human Understanding* is the following:—

First.—He proposes to make inquiry into the origin of those ideas which we observe, and are conscious to ourselves, and how the understanding comes to be furnished with them.

Secondly.—To show what knowledge the understanding hath by those ideas, and the certainty, evidence, and extent of it.

Thirdly.—To inquire into the grounds of faith and opinion; whereby he means that assent which we give to any proposition as true, of whose truth we have as yet no certain knowledge.

This is the method which he proposes to pursue. Its true merit consists in having commenced with the psychological problems. This is indeed the true method. Without the knowledge of our understanding, we should never expect to attain a perfect

knowledge of everything that is attainable by our limited capacity. The knowledge of our understanding is implied in every science. But are the ontological problems to be omitted? They should certainly be postponed; but to neglect them entirely, is to commit a great mistake. Locke not only neglects the ontological problems, but begins with the origin of ideas. Instead of inquiring into the actual characteristics of our cognitions, he begins to seek their origin. Certainly he runs a great risk. If he does not happen to hit upon the true origin, he will deceive himself; the one he shall propose shall be only hypothetical, and therefore have no ground in science. The first maxim to be observed in scientific investigations is to take nothing upon hypothesis; and the second to neglect nothing. These Locke has set at defiance. We see the rock; let us see whether Locke has made shipwreck upon it. Has he succeeded in hitting upon the true origin? No. According to him, Sensation and Reflection are the two sources of all our ideas. He has thus imposed a system upon himself, and tries to resolve all our knowledge from experience—sensation and reflection. True experience is the condition of all our knowledge, but it is not therefore derived from it. Having commenced with the origin of ideas, he has perverted all knowledge. There are many ideas that are not derived from sensation and reflection. Cousin takes and examines the ideas of space, time, infinite, personal identity, and substance, and shows that they are not derived from the origin which Locke assigns them. Thus the radical errors of Locke are,—*1st*, he begins with the origin of ideas, instead of preparing an inventory of them; *2nd*, he neglects the question regarding the actual state of our cognitions; *3rd*, he not only postpones the ontological question, but entirely neglects it.

3. Those ideas which the mind derives from sensation and reflection, unmixed, and entirely distinct from one another, and which are the subsequent materials of all our knowledge, are called simple ideas. Thus, though we find hardness and warmth in the same piece of wax, yet the idea hardness is as distinct from that of warmth, as it is from the smell of a rose, or the whiteness of a lily. When the mind is furnished with these simple

ideas, it by the faculties of combining, comparing, enlarging, and abstracting, derives what he (Locke) calls complex ideas. A dozen, beauty, theft, &c. are all complex ideas.

4. The idea of pure space according to Locke is obtained by Sensation; or, to be more minute, by the sight and touch. Cousin objects to this. According to Locke himself, sight and touch give us the idea of solidity only. But the idea of solidity is nothing less than body. From these premises, Cousin draws the legitimate conclusion, that with Locke, body and space are the same. He (Locke) says so implicitly; but he also explicitly says that "to say that the world is somewhere, is the same as to say that the world exists." The existence of the world, which certainly is a body, is the same as the existence of the place it exists in. He evidently confounds body with space. Let us see whether the idea of space, which we possess, which all men possess, is the same with the idea of body; whether we confound the idea of body with the idea of space. Every one knows that this paper exists, and that it exists in some space; that the world exists, and exists in some place. Is not, then, the existence of the world one thing, and the space it possesses another? Certainly. Now, can we suppose that this paper, this world, ten thousand other worlds, may not exist? Yes, we can. But can we suppose that the space does not exist? We can suppose the non-existence of a body, of all bodies, but we cannot suppose that space may not exist. Thus we see that the idea of space is *necessary* and *absolute*. On the other hand, the idea of body is *contingent* and *relative*. The idea of space is a rational conception, while the idea of body is a sensible representation. These differences clearly show that the ideas of body and space are distinct from each other, and are therefore not the same.

Cousin distinguishes the logical order of ideas from the chronological. The logical order of ideas is the condition of the existence of an idea without the supposition of which the other cannot be supposed. Thus the idea of space is the logical condition of the idea of body. We cannot suppose a body to exist, except in some space. The chronological order is the develop-

ment of one idea before another in respect of time. Thus the idea of body is the chronological condition of the idea of space. Locke confounds the logical order with the chronological.

5. If actual thinking is as inseparable from the mind as extension is from body, when a man sleeps we must consider him as thinking. If, what passes in his mind when he sleeps, he is not conscious of, he cannot be said to be thinking. If he thinks, and knows not what he thinks about, is not aware of the emotions produced in his mind while asleep, he is not the same man. Socrates awake and Socrates asleep would be two distinct persons. Upon these grounds, Locke proves that man does not think always, though the mind exists; or that thought or feeling is not essential to the existence of the mind. .

JAGANNATH NARAYAN.

1. The preliminary question of all philosophy is the classification of philosophical questions.

The first law of classification is, that it should be complete, embracing all questions, particular and general; both those that present themselves immediately, and those that are to be sought for in the depths of science—in short, all that are known, and all that are possible.

The second law of classification is, that it should establish the relations of all the questions which it enumerates, and describe with precision the order in which each should be treated.

Philosophy is only the science of human nature considered in the facts which it affords to our observation. Among these facts there are some that refer more especially to the intelligence, and hence they are called metaphysical facts. Metaphysical facts, or the phenomena by which the intelligence displays itself, when reduced to general formulas, constitute metaphysical principles. Metaphysics is therefore the study of the intelligence in that of our intellectual principles.

Philosophical questions are at the outset divided into two great classes. The intellectual principles may be considered in two points of view, either with respect to the intelligence in which they exist, the subject that possesses them, or with refer-

ence to their respective objects ; that is, no longer in ourselves and themselves, but in their external applications. When viewed in reference to the subject that possesses them, they are briefly called subjective, and on the other hand, when viewed with reference to their external applications, objective. Besides these, there is another set of questions : for instance, in speculative philosophy, when the subject and the object are the same, which are termed subjective—objective. All philosophical questions, then, are divided, according to Cousin, into two grand classes, viz. subjective problems, and objective problems, which include all sensations, all perceptions, and all ideas.

Now let us see which of these two classes of problems should be treated first ; should we take up first the subjective or the objective class ? Undoubtedly the subjective should be treated first ; for the external objects exist for us only, in as far as they are manifested to us in our consciousness. Philosophically speaking, our knowledge of the subjective—the me—is earlier than the knowledge of the objective,—the not me,—which is only known to us in and through the me. We shall take up, then, first, the subjective problems, and see how many classes can they be sub-divided into.

They are divided into three classes. We should first return into our consciousness, and carefully study all the phenomena manifested there, and view them under all their different characteristics and aspects ; we should be sure of having omitted none, and having taken nothing upon supposition ; and it is thus that we shall be able to collect the statistics of the human understanding, by classifying them according to the known laws of scientific classification and division. We shall thus acquire the inventory of the phenomena of the human understanding, as they are at present manifested in our consciousness, and know the subjective actual, or the actual phenomena of the understanding, as they are given at present, relating to the subject. But the subjective problem is not yet exhausted. We know the actual, but we are ignorant of the primitive. We should then investigate, by all the means in our power, what were the phenomena that are at present manifested to us in our consciousness,

at their origin, and we shall then know the primitive man. Between these two questions, there is still another. We know the actual and the primitive, but we are still ignorant of the way by which we came from where we were to where we are. This is the question of the relation of the primitive to the actual, and when we have done this, then the subjective problem will be entirely exhausted. After all, then, the subjective problem is again in its turn divided into three classes, viz. *1st*, the subjective actual ; *2nd*, the subjective primitive ; and *3rd*, the relation of the subjective primitive to the subjective actual.

Let us now consider the *2nd*, the objective problem. The objective problem divides itself into two classes—*1st*, the question concerning the absolute, or concerning the reality of the existence of anything objective ; and *2nd*, the question concerning the reality of the existence of particular objects, or the logical and the metaphysical. We have now seen which of the two problems should be treated first, and into how many parts each of them respectively is divided. Let us then see in what order should the three parts into which the first is divided be treated, and in what order the two parts into which the second is divided should be treated.

Of the three parts into which the subjective is divided, we should treat—*1st*, the subjective actual ; *2nd*, the subjective primitive ; and *lastly*, the relation of the primitive to the actual ; and of the two parts into which the objective is divided we should treat—*1st*, the question concerning existence in general ; and *2nd*, the question concerning particular existences.

SHRIDHAR VITHAL.

3. Simple ideas are those that consist of one uniform appearance in the mind, and which cannot be resolved into any other. According to Locke, these are the elements of all our knowledge, and in their reception the understanding is barely passive. Complex ideas are those which are framed by the understanding out of simple ones, by certain powers that it possesses. These powers are by Locke reduced to three, namely the faculties of composition, and abstraction. By the

first, the mind takes or grasps up several simple ideas from the contiguous stream of ideas that flows, joins them, and considers them so united as a unity—as one idea—in thought. By it, the mind takes the plurality of nature into a unity of thought; and gets its notions or concepts. Locke calls these complex ideas. By the *second* faculty, the mind compares ideas without uniting them; and thus gets all its ideas of relation. By the *third*, it, out of several simple ideas, disregarding that in which they differ, abstracts that in which they resemble; considers that alone; and makes that the object of its thought. This, in which they resemble, is called a general idea.

DADABHAI RUSTAMJI.

4. Locke, having taken Sensation and Reflection to be the only originals of our knowledge, derives the idea of pure space from Sensation—*i. e.* by sight and touch, the same as in body. Cousin speaks that Locke has not totally confounded the idea of body with the idea of pure space, for in one part of his work he shows that these two ideas are quite distinct; but it is his system that has led him to such a blunder. Locke says, that the idea of body is the continuity of solid, separable, moveable parts, while that of space is the continuity of unsolid, inseparable, and immoveable parts. Thus far Cousin sees he is right. But when he says that the idea of pure space is got from sight and touch; and again, that nothing but the idea of body is got from sight and touch, he necessarily reduces the idea of space to the idea of body, and this he was forced to do in consequence of his presupposed system. After criticising this doctrine of Locke, Cousin proceeds to show that the idea of body is the chronological condition of the idea of space, or, in other words, in the order of knowledge it is the idea of body that is first got; and without this we would never have the idea of space. But then, in the order of reason and nature it is the idea of space which is first—that is, the idea of body presupposes the idea of space; for the body, if it exists, must exist in some space; and hence the idea of space is the logical condition of the idea of

body. His distinction, then, between the logical and chronological order of ideas, is, that if any idea presupposes another idea, the former is the chronological condition of the latter, which is the logical condition of the former. His distinction between body and space is, that the idea of body is contingent, for we can imagine a body to be destroyed in whatever circumstances, but to imagine of destroying space is impossible, and, therefore, its idea is necessary and absolute. The idea of body implies limitation, and that of space absence of all limitation. The idea of body is got from our senses, while that of space is a pure rational conception.

JAHANGIR FRAMJI.

5. According to Locke, the mind thinks with different degrees of attention. Since, then, thinking admits of intension and remission, it is the action of the soul, and not essential to its existence. For, the operations of agents are susceptible of variety, but the essences of substances admit of no such variation. They imply permanence and unchangeableness.

DADABHAI RUSTAMJI.

MORAL PHILOSOPHY.

THIRD YEAR STUDENTS.

1. All our *Benevolent Affections* are accompanied with agreeable feelings or emotions. It is therefore impossible for us to exercise benevolence without adding to our own happiness. And those writers, whose business it is to afford amusement, have made this class of our active principles the vehicles of pleasure. Hence the principal charms of tragedy. How far it may be desirable to separate in this manner the luxuries of pity from the opportunities of exercising it may be doubted; but the fact remains, that in promoting public good we are indirectly promoting private good, or our own happiness. So that self-love, or an enlightened regard to our own happiness, is a guarantee that we should endeavour to promote public good, or the happiness of our species. Benevolence and self-love, though two distinct

principles, thus coincide, as regards the promotion of human happiness.

MOTILAL JIVANDAS.

2. We shall first consider man as a being having various passions, appetites, affections, and the principle of reflection or Conscience ; and from this we shall see that the principle of conscience is superior to all of them.

Passion or appetite is a simple tendency towards such and such objects, without taking into consideration the means to be employed for their attainment. Now suppose that the gratification of this appetite or passion requires means which are wrong or vicious : conscience steps in and disapproves. Now which is to be obeyed, the voice of conscience, or the mere impulse of the passion ? Surely any man of a fair understanding would give the preference to the former ; for it prevents the gratification of a present appetite, which is contrary to our nature. Thus we see the superior authority of conscience. It magisterially exerts its authority, though uncalled. If passion prevail over this authority, it would be a mere usurpation. We must here make a distinction between power and authority. In a civil government, a rebellious man may by his mere strength and power gain mastership for a time, but the authority of government would remain unshaken. In the same manner, in the human constitution, a passion or appetite being strong, may prevail for a time, but the authority of conscience would remain unshaken. If it had strength as it has right, and power as it has authority, it would have absolutely governed the world. It regulates and keeps all the under principles in due subjection. Thus sacred is its authority.

Now let us make a contrary supposition, and let us take our nature as constituted of passions, appetites, affections, and conscience, the latter being of equal authority with the others. There will be no control of one over the other, and we will be acting conformably to our nature when any one prevails according to its strength. Now let us suppose a son to murder his father. Here he acts according to the strongest of his passions, and consequently he would be acting in conformity to his

nature. But the love of a son to his father is also in conformity to his nature. Consequently parricide and filial duty, which are quite contrary affections, are in conformity with his nature—which is absurd. It is only when every passion or affection is under the supreme control of conscience, and guided under its influence, that man is, from his nature, a law to himself. Of all the passions, affections, and appetites, in his nature, Conscience sits at the head.

EDALJI SHAPURJI.

3. The object of Conscience is to prevent us from doing wrong and injustice to others. The object of Self-love is to prevent us from doing wrong and injustice to ourselves. The object of conscience is indirectly to do good to others ; the object of self-love is directly to do good to ourselves. But our real interest, as we have shown when treating of benevolence and self-love, coincides with the interest of others. Therefore conscience and reasonable self-love ultimately coincide.

4. Our having the notions of right and wrong is the principal ground of our argument for proving the existence of a future state. That we are under an obligation to follow conscience, and not act just as we please ; our conscience telling us that our actions will be followed by suitable rewards or punishments, according as they are good or bad, is the fundamental argument in proving the existence of a future state. The attestation of conscience is the principal proof.

(a). The nature of our mind is such, that it analogically leads us to infer the existence of a future state. The subordination of the other principles, and the supremacy of conscience, point the same way. Our constitution and external circumstances prove that we are only in a state of trial. The ennobling pleasures we derive from the consciousness of our being able to resist the temptations to commit vicious actions, make us to anticipate still greater pleasures in another life. After having committed vicious actions, the remorse which we feel tells us that the punishment will not end with this.

MAHIPATRAM RUPRAM.

5. Even the Atheist must admit, from an observation of nature, the fact that virtue and happiness are connected in this world. If so, his objection against a future state may be made groundless, by asking him a question on his own principles of *necessity*—"Why should we ever expect these two things, virtue and happiness, to be disconnected, which we see connected?"

GANESH DHONDEVA.

3. The end of Conscience is, as abovementioned, to regulate the principles of human nature (that it is prevailed over by passions is a thing we will not take into consideration). The business of conscience, as such, is to make our conduct the most virtuous; and as virtue leads to happiness, conscience indirectly leads to it too. But its object in the first instance is virtuous conduct. Reasonable self-love puts us on the path to virtue, and therefore to happiness. Conscience dictates to us what course of life is the most proper, the most virtuous; and, as before mentioned, if conscience had the might, it would have absolutely governed the world. Hence we see the reason why all men are not perfectly virtuous. The coolest self-love, showing what measures are the most proper to gain a certain end, shows the virtuous line of conduct, and therefore happiness. These two, then, coincide in making us happy. This is not true in all men, because they do not follow the dictates of conscience as well as coolest self-love. In fact, in few men do we perceive conscience followed, and that not even to the required extent, and consequently we do not see them happy. The ultimate end of conscience is happiness, and that of reasonable self-love is the same too. Hence we see that they ultimately coincide.

MOROBA SUNDARJI.

LITERATURE.

THIRD YEAR STUDENTS.

1. "In following Othello to Cyprus, it is not to serve him that I am going; but I follow him to serve mine own purpose.

For if my outward actions show the real nature and intentions of my heart, it will be very soon that I will put my heart on my arm, to be pecked at by jackdaws." "In compliment extern" means external show. The general drift of the passage is, that "nobody would be able to judge of my intentions from my outward conduct."

Iago divides men into two classes ; the one he calls "kneecrooking knaves, who, doting on their obsequious bondage, serve their masters, like asses, for nothing but the provender." Under the other class he includes those that, seeming to serve their masters, serve but themselves ; and when they have feathered their nests, do themselves homage. Of the former class he speaks as having no souls in them ; and includes himself under the second class. The peculiar end he alludes to is serving his own interest. In the last sentence, the first "I" is the subject, and "what I am" is the predicate of the proposition.

2. Iago and Roderigo came near the house of Brabantio, and cried "Thieves ! thieves ! thieves !" and told Brabantio to look to his purse, doors, and daughter : they said, "You are robbed, Sir !" Upon this, Brabantio, coming down stairs, asked them what they told him of robbing, adding, "This is Venice ; my house is not a grange"—meaning that his house was in Venice, where so good and perfect security reigned ; and that it was not a farm-house, alone in the solitude, where it may be liable to be frequented by robbers.

3. In this passage, Othello relates the course which he took in winning over Brabantio's daughter. The first "which" in the question refers to the eagerness Desdemona showed in order to hear Othello relate his history to her father ; "which observing," says Othello, "I took advantage of a favourable opportunity to speak to her, and contrived means to draw from her an earnest request that I should relate to her the whole story of my career, of which she had heard something in *part* when I related it to her father." The reason why she had not heard the whole of it at the time was, that she was frequently called in[to] the house to attend some business. The word *intensively* was, in the time of Shakspeare, used in the same

sense as attentively. "I consented, and often did beguile her of her tears, when I did speak of some distressful stroke that my youth suffered." To beguile a man of his tears is to draw tears from his eyes without his knowledge. For example, when we see a tragical act well played in the theatre, although we are aware that the man is not actually in distress, yet we for the moment forget ourselves, and tear-drops begin to roll down our cheeks : in this case the actor may be said to beguile us of our tears.

The emotion alluded to in the last sentence is pity or compassion ; and its tendency to advance his suit is evident ; because "compassion," as Butler says, "is momentary love," and therefore it was well fitted to work on the purpose of love. Virgil [? Dryden] speaks of this emotion in the following terms :—

"Pity melts the soul to love."

4. "Upon this *hint* I spake." This hint is the request of Desdemona to Othello, that if he had a friend that loved her, he (Othello) should but teach him how to tell his (Othello's) story ; and that would woo her. When Othello related his whole story to her, she was so charmed that she cried, "It was strange ; it was passing strange : it was pitiful ; it was wondrous pitiful." This admiration of Othello's conduct drew from Desdemona the request above referred to.

"She loved me for the dangers I had passed, and I loved her that she did pity them." The name of this emotion is sympathy ; it is the emotion by which we share in the happiness or misery of our fellow-beings ; it works differently on occasions of happiness or of misery : but this difference in its workings tends to promote the happiness of mankind. When we share the sorrows of our friends, we diminish the amount each of us had to suffer ; but when we partake of their joys, what is most singular, we increase the amount each did enjoy.

6. Othello, having entered the bedchamber, he saw Desdemona asleep in her bed, and a lamp burning beside her. He was going to kill her with his sword ; but in the mean time spoke to himself in the following manner :—"I had better put out the light (meaning the lamp) ; and then put out *the* light" (meaning

the light of life). He then says to the lamp, "If I quench thee, I can restore thy former light, if I should repent"; then he speaks as if to Desdemona, who is still asleep—"If I once put out thy light (life), thou artful type of excelling nature! I know not where to find the Promethean heat (fire) that can relume thy light again."

Prometheus was the son of Iapetus. He had made a man of clay; and in order to animate that man, he, by the assistance of Minerva, stole the sacred fire from heaven; upon which Jupiter was incensed, and caused Prometheus to be put in chains on Mount Caucasus.

GANESH DHONDEVA.

2. When Brabantio was told that he was robbed of his daughter, he said, "*This is Venice*"—that is, I do not believe that, in a city like Venice, which is governed well by nobles, and where there is security of property and person, that robbery should be committed in the house of a noble; "my house is not a grange"—*i. e.* my house is not a farm-house, but that of a noble. Robbery can take place in such places as granges, but not in the houses of nobles.

4. "Upon this hint I spake";—*i. e.* when I saw that the relation of my adventures excited her to pity, and consequently love, towards me, I spake. The emotion which was the principle of attraction in this case was that of sympathy. It is that emotion by which we accommodate our minds to the feelings of our fellow-creatures. It gives rise to an agreeable emotion when we participate in the joys and sorrows of our fellow-creatures. Our joys are *doubled* when they are communicated to others, while our sorrows are greatly diminished by communication to others. We place ourselves in the situation of the sufferer when we sympathise with him. It is an auxiliary to our moral faculty. Men often do actions from sympathy, which they would not have done easily from a sense of duty. Thus sympathy leads men to perform moral actions, as well as to promote the happiness of their fellow-creatures.

5. "Who steals my purse steals trash"—*i. e.* whoever steals

money from me steals a trivial thing, or a thing but of little use; "but the man who deprives me of my reputation, and tries to lower me in the estimation of my fellow-creatures, does not thereby gain more reputation, for my lost reputation does not go to make an addition to his own. He is not raised in the estimation of the people by my being lowered. Thus nobody has gained by my loss, which is a real *loss to me*."

7. Othello was a general of great bravery. He was of a war-like disposition, and spent most of his life in war and strife. He was inured to all the hardships consequent on such a life. He steadily pursued the commands of his superiors, and was seldom found failing in his duty. His manly character surmounted all difficulties which attend a life of perils. He was guided by a sense of duty, which held a prominent place in his heart. He would even forego enjoyment and life for the sake of performing his duty. With regard to his private character, we shall say a few words. He was steady in all his plans, and firmly adhered to his resolution. For having once made up his mind, nothing could shake it; and he will not fail to put his plan into execution. With all this steadiness of pursuit, he was a man of short-sighted views. He was rash, and his thoughts did not reach beyond the present moment. His indignation was easily roused. He had a great regard for his own character, and would even lose his life to prevent it from being tarnished. Easy of persuasion. Iago took advantage of his rash and indignant disposition. It was through his rashness that innocent Desdemona was *obliged to part with her life*; and it was this which ultimately brought ruin upon him, and cast him into oblivion.

Iago was a man of an artful disposition; had no regard for others; very prone to promote his own interests, to the disregard of those of others. He did not hesitate to take unlawful measures where his own interest was involved. He was not merely selfish he was jealous. His jealousy towards Cassio, and the base means he adopted in order to bring about his ruin, afford an *example* of his character. He was not of a sincere disposition. His outward actions were not the real denotements of the motives of his heart. He seemed to be what he was not. He was

prolific in devising means base and vile in themselves, but which were calculated to advance his own interest. He was cunning and dishonest, and much skilled in the art of double-dealing. It was he who pursued Othello, and filled his ears with false suspicions against Desdemona ; it was he who brought about the death of that innocent creature ; and it was he who brought about the disgrace and ruin of that rash Othello. With what base means and cunning devices he brought about the deaths of Roderigo and Desdemona, and the misfortunes of Othello ! His character is shocking to humanity. But then he did not escape punishment. His own conduct was the cause of his misfortune.

Desdemona was of a gentle and amiable disposition. Patient to all suffering, her pity was moved at every instance of affliction in others ; her sympathy easily excited. It was the afflictions of the Moor which moved her so much, and led her to love him. She even left her father, to marry a man who had suffered hardships. She remained constant in her love towards the Moor up to the time of death. She did not prove ungrateful to him, but maintained a character of untainted repute.

EDALJI SHAPURJI.

HISTORY.

FIRST YEAR STUDENTS.

1. The Conquest of Constantinople, by the Turks, 1453 ; the discovery of the passage to India by the Cape of Good Hope, by Vasco De Gama, 1498 ; the discovery of America, by Columbus, 1492 ; and the effect of these discoveries in changing the great Commercial Routes ; the invention and use of Gunpowder ; all these events together effected a change in the politics of Europe, sufficient to justify the division of Modern History from that of the Middle Ages.

3. Germany was the country which beheld the rise of the Reformation. The attacks of the Reformers were directed, not only against the doctrines of [the] Papacy, but also against the temporal authority of the Popes. The cause of Luther was embraced by the German princes ; for the Reformation, says

Heeren, owed the immense influence it gained to the nature of the interests affected by it; for these were of as much importance to the people as to their rulers. The Reformation thus assumed its political character, and, according to Heeren, the history of its connexion with politics turns on four points:—Which of the German princes espoused its cause; why did they do so; and in what manner? In what manner, and to what extent, did they unite in forming the party which was opposed to the Emperor? What were the views, and what were the measures, of the Emperor Charles V. in his opposition to it? How came the parties engaged to a final rupture, and how was the matter settled?

Luther was summoned before the Diet of Worms, and was outlawed by the Emperor, 1521; and thus arose the breach between Charles and Luther's patron princes.

The next following years, the Reformation spread into Saxony and Hesse, and created a ferment of ideas. In this stage of its progress, the Reformation produced two events—1st, the War of the Peasants, which originated in Suabia, and spread into Thuringia; but the battle of Frankenhausen put an end to it, 1526; 2nd, Prussia was secularised by Albert of Brandenburg, 1525. These events, together with the threatening appearance which the battle of Pavia enabled Charles V. to assume, led to the first alliances distinguished by difference of faith; the Catholics formed a league for mutual defence at Dessau, 1525, while the Protestant States did the same among themselves at Torgau, 1526. Peace could not have been preserved, now, in spite of these associations, had not the minds of the parties been directed to the assembling of a general council.

The Diet of Spire, which gave the Protestants their name, assembled in 1529. The reformed party having, at the meeting of that Diet, refused to acknowledge a decree which would have worked their ruin, received the name of *Protestants*. The one at Augsburg, assembled in 1530, by having established the articles of their belief, showed that with all [the] explanation which the ingenuity of man could give, doctrines so opposed as those of the Protestants and Catholics would never be reconciled. The Protestants formed a league at Smalcald in 1531. Notwithstanding

all these circumstances, unfavorable to a conclusion of peace, a peace *was* concluded at Nuremburg, 1532.

Many circumstances subsequently served to maintain peace ; but after the treaty of Crespy, between Charles and Francis of France, was made, by which the wars between those two sovereigns were concluded, the Emperor commenced war with the Protestants, especially the league of Smallcald. The league was dissolved ; and the Emperor imposed the *interim* upon his subjects. The city of Magdeburg opposed, and Maurice, Elector of Saxony, was sent to reduce it. This prince, a Protestant, dissatisfied with the conduct of the Emperor, commenced a war against him, which terminated in his (Maurice's) victory. A peace was concluded at Passau, in 1552 ; and it was afterwards confirmed by a Diet at Augsburg.

RAMKRISHNA GOPAL.

GEOGRAPHY.

FIRST YEAR STUDENTS.

1. *a.* The properties of the air on which the production of Winds in general depends, are fluidity, weight, elasticity, and expansibility. When the repose of the atmosphere is disturbed by any cause, the air is put in motion, and a wind is the result. But winds are generally caused by the unequal distribution of heat over the earth's surface. If two portions of land be unequally heated, the air over the portion most heated, becoming specifically lighter, is pushed up by the comparatively colder air coming from the less heated part. This, again, in its turn, becomes lighter, and is accordingly forced up. But in the upper strata of the atmosphere, the direction of the winds is contrary.

c. Rain is formed by the intermixture of two or more volumes of humid air, of different degrees of temperature, the several parts in union being incapable of holding the same amount of temperature that each can separately retain. This is the result of the law that the capacity of the air for moisture decreases at

a faster rate than the temperature. The intermixture of different portions is brought about by the winds. When such admixture takes place, rain falls in the form of small globules. When wind blows from the same quarter, the moisture is not so great.

The south-west monsoon does not bring rain to the whole of India. When it blows over the Ghauts, most of the moisture with which it is filled is here precipitated, and thus causes a change in the season of the year. At those parts of the earth which are near the equator, the monsoon begins early in the year. In the southern parts of India, the monsoon commences in the month of May, but does not reach Delhi until the month of July.

JAVERILAL UMIASHANKAR.

3. *a.* The causes which have combined to make Great Britain so pre-eminently distinguished by her industry and progress in the arts are various ; but most of them have their origin in the favorable moral character of the people, and the peculiar circumstances in which they are placed. Their insular position and internal resources have also a great part in bringing about that result.

b. The most important of the mineral products* of Great Britain are coal and iron ; to the abundance of which she owes much. Lead, copper, and tin, are also important minerals. Cotton, woollen, silken, and hardware, are the most important manufactures.

c. Agriculture is the most important of all branches of industry, on account of its great returns ; and because on it the support of society depends.

RAMKRISHNA GOPAL.

SECOND YEAR STUDENTS.

1. *a.* The Earth, considered as a planet, consists of three parts, namely solid, liquid, and aeriform. The solid is situated at the bottom, the liquid above it, and the gaseous above all.

b. The area of the earth's surface is 196,500,000 square miles. Of these 51,000,000 square miles is land, and 145,000,000

square miles are covered with water. The land in the northern hemisphere is two-thirds, and one-third in the southern. There is two and a half times as much land in the eastern hemisphere as in the western. The pole of the land hemisphere is London.

2. *a.* The Antarctic Drift Current is caused by the melting of the ice, and the south-east [west] winds. It goes first towards the north, and then turns towards the east, and when it comes near the coast of Chili, it divides itself into two parts, the one going towards the south to Cape Horn, and the other northwards along the coast of Chili. The former receives the name of Cape Horn Current, and the latter the Peruvian Current, a branch of which is called Mentor's Counter Current. Its velocity is so great, that a ship sailing from Valparaiso to Lima, a distance of about 1,600 miles, performs the voyage in less than eight or nine days, but in returning takes weeks, and sometimes months. Near the Galapagos Islands, the current joins the great Equatorial Current. The hot current coming from the Bay of Panama produces a difference of temperature in the water of the sea at the Galapagos Islands. At the north of the islands, the temperature is 80° , and at the south 60° . The cause is evident: the current from the south pole is cold, and the other, coming from near the equator, is hot.

b. The Equatorial Current of the Pacific is caused by the rotation of the earth from west to east: the direction of the current is therefore from east to west; and its velocity is 7 or 8 miles in 24 hours. Its southern limit is 26° south latitude, and [its northern] 24° north. The North Equatorial Counter Current is situated between 5° and 10° of north latitude.

JAGANNATH NARAYAN.

3. *b.* Climate, as understood by Humboldt, contains the humidity of the air, the phenomena of electricity, and all the various kinds of agents beneficial to the animal and the vegetable life.

The chief causes which determine physical climate are—1, the latitude of the country, that is its geographical position with respect to the equator; 2, the elevation of the land above the sea

level ; 3, the proximity to, or remoteness of a country from, the sea level ; 4, the slope of the country, or the aspect it presents to the sun's course ; 5, the extent and the direction of the mountain system ; 6, the degree of cultivation and improvement at which the country has arrived ; 7, the prevalent winds ; 8, the annual quantity of rain that falls in a country.

c. The Isothermal and Isochimenal curves deviate much more from the parallels of latitude than the Isothermal.

Isothermal lines are those lines which pass through those points on the earth's surface which have the same mean summer temperature.

Isochimenal lines are those which pass through those points on the earth's surface which have the same mean temperature in winter.

Isothermal lines are those which pass through those points on the surface of the earth which have the same mean annual temperature.

SHRIDHAR VITHAL.

POLITICAL ECONOMY.

SECOND YEAR STUDENTS.

1. a. In order to understand the manifold functions of a circulating medium, there is no better way than to consider what are the principal inconveniences which we should experience if we had not such a medium. The first and the most obvious would be the want of a common measure of values of different sorts. If a tailor had coats, and wanted to buy bread, or a horse, it would be troublesome to ascertain how much bread he ought to obtain for a coat, or how many breads he should give for a horse ; the calculation must be recommenced on different data every time he bartered his coat for a different kind of article, and there would be no current price, or regular quotations of value. Whereas now, each thing has a current price in money, whereby he gets over all difficulties, by reckoning his coat at £4 or £5, and 4 lb. loaf at 6d. or 7d. As it is much easier to

compare different lengths by expressing them in a common language of yards, feet, and inches, so it is much easier to compare different values by expressing them in a common language of pounds, shillings, and pence. In no other way can values be arranged one above another in a scale ; in no other way can a person conveniently calculate the sum of his possessions ; and it is [more] easy to ascertain and remember the relations of many things to one thing than their innumerable cross relations with one another. This mode, expressing values in a common language of pounds, shillings, and pence, is even by itself so important, that it might be used even if a pound or a shilling did not express anything real, but a mere unit of calculation. It is said that there are African tribes in which this somewhat artificial mode of expressing values is used. They calculate the value of things in a sort of money of account called *macutes*. There is no real thing called a *macute* ; it is a mere conventional unit for the more convenient comparison of things with one another.

But besides this, the inconveniences of barter are so great, that without some commodious means of effecting exchanges, the division of employment could hardly have been carried to any considerable extent. If a tailor had only coats, he must starve before he could find a person, having bread to sell, who wanted a coat. Besides, he would not require as much bread at a time as would [be] worth a coat, and the coat could not be divided. Every person, then, would at all times hasten to dispose of his commodities in exchange for anything which, though it might not be fitted to his own immediate wants, but was easily divisible, and generally desired ; so that he would be sure of finding persons willing to receive it in exchange for anything which he pleases to buy. Bread is extremely divisible, and an object of universal desire : but this is not the sort of thing required ; for of food, unless in expectation of a scarcity, no one wishes to possess more at a time than is requisite for his immediate consumption. So that no one is sure at all times to find purchasers for articles of food ; and unless soon disposed off, they perish. The thing which any one would like to keep by him for making

purchases must be one which, besides being divisible, and generally desired, does not deteriorate by keeping. The above, then, are the two functions of money, viz. to serve as a commodious measure of values, and to facilitate exchanges.

6. By a tacit concurrence, almost all nations fixed at a very early period upon certain metals, especially gold and silver, to serve this purpose. No other substances unite the necessary qualities in so great a degree, with so many subordinate advantages. Next to food and clothing, and in some climates even before clothing, the strongest inclination in a rude state of society is for personal ornaments, and the kind of distinction which is so obtained by rarity or costliness in such ornaments. After the immediate necessities of life were satisfied, every one was eager to accumulate as great a store of commodities, at once costly and ornamental, which were chiefly gold, silver, and jewels. These were the commodities which it pleased every one to possess, and every one was sure of finding immediate purchasers for them. They were among the most imperishable of all the substances, containing great value in small bulk, were portable, durable, and were easily hid—a consideration of great importance in an age of insecurity; (jewels are inferior to gold and silver in the quality of divisibility, and are of various qualities, not to be easily discriminated without great trouble;) and are always of the same quality, and their purity may be ascertained and certified by a public authority. To these various important qualities, which originally recommended gold and silver to serve this purpose, another came to be added, the importance of which only unfolded itself by degrees. They are among the least influenced by any of the causes which produce fluctuations in values. No commodity is quite free from such fluctuations. Gold and silver have sustained, since the beginning of history, one great permanent alteration in value from the discovery of the American mines. But, upon the whole, no commodities are so little subject to fluctuations in their values; hence gold and silver are, more than any other commodity, adapted for paying or receiving any quantity at a certain time. For if the engagements were made in corn, or cloth, or any other thing, which is subject to fluctua-

tions, there will be a great deal of disturbance caused, either to the payer or the receiver, as the case may be.

2. *a.* The value of a thing is its general purchasing power. The value of money, then, (money also being a commodity,) is its purchasing power—the quantity of other things which it will exchange for. If prices are high, money will buy little of other things, and is of low value ; and if prices are low, money will buy much of other things, and is consequently of a high value. The value of money is inversely as general rises ; falling as they rise, and rising as they fall. This is the true meaning of the expression, “value of money.” But there is a wrong sense in which it is made use of. As the capital from the loan market is generally borrowed through the medium of money, (which is not in itself capital,) the loan market is called a money market ; and the equivalent given for the use of capital is not only called the interest of money, but, by a gross perversion of terms, the value of money. This ambiguity of language, assisted by some fallacious notions, led men to suppose that there is some intimate connection between the value of money, meaning the rate of interest, and the real value of money, meaning the purchasing power of the circulating medium. By value of money, then, we mean the exchange value ; and by money the medium of exchange, and not the capital which is transferred from hand to hand through that medium.

b. The value of money, other things being the same, depends upon its quantity, multiplied by the number which expresses the rapidity of circulation. By rapidity of circulation, I mean the average number of purchases made by each piece, to effect a given amount of pecuniary transactions. The permanent value of money is determined by cost of production of the precious metals of which it is made, while its market value is determined by demand and supply. The supply of money means the quantity of money in circulation, and the demand of money consists of all the goods in the market. The money and the goods are seeking to be exchanged for each other. Therefore, if all the goods in the market remain the same, and the quantity of money is supposed to be doubled, the prices will be

doubled. This is a necessary consequence of the fact that twice as much money is now to be given for the same number of goods. But the same piece of money is exchanged for many times against goods before all the goods in the market at one time are removed; therefore the quantity of money laid out is not the same with the quantity in circulation. The same piece of money should be considered as many distinct pieces as the number of times it changes hands. The same case happens with goods. They are sold from hand to hand many times, before they are finally removed from the market; therefore they also should be considered as many times as the number of hands through which they pass. Now, taking both these into account, we have got the following relation between the value of money and the prices of goods:—The sum of the goods, multiplied by the number of times they circulate, is equal to the quantity of money multiplied by the number of times it circulates. If other things are the same, I have already told what the value of money will be. This is a property peculiar to money with respect to its value, depending upon demand and supply; that every increase of its supply raises [lowers] its value exactly in proportion to the excess, and that every diminution of it raises its value exactly in the same ratio. It is because money is the universal means of purchase. The demand for other things is for those things only, and is limited by our powers of consumption; while the demand for money is limited only by the means of the purchaser.

3. *a.* In a country where there is a double standard, the proportions of the two metals (as twenty shillings in silver are equal in value to one sovereign in gold) are made to correspond to the costs of production of both the metals; or, to say in a few words, that they are grounded upon their costs of production. And now, if the costs of production of both these metals remain the same, there is no objection to the adoption of a double standard. But this is far from being the case. Gold and silver, although the least variable, are not invariable; and when they vary, they do not vary simultaneously. This is the greatest objection. For suppose gold rises in value in proportion to

silver. Gold, as bullion, is of a higher value than gold in coin. Then two consequences will arise: either all payments will be made in silver, or gold will be melted. The double standard, then, gives rise to a fall of value, commonly called a depreciation; since that one of the metals will always be a standard, whose real value has fallen below its rated value. If the tendency of the metals be to rise, that one will always be given in payment which has risen least, and if to fall, that which has fallen most.

6. The expedient which England has resorted to, to keep both the precious metals (gold and silver) in circulation, so as to avoid these objections, is the following:—In England, silver is a standard for small payments; small pecuniary payments, amounting to forty shillings, are made in silver. No one is obliged to receive in silver more than that amount; while gold is a standard for large payments. Coined silver is a little rated above its intrinsic value, so that a little turn of the market in its favour may not produce any inducement in the holders of silver coins to melt them. And lastly, the quantity of silver coins in circulation is entirely restricted by the Government to the proportion requisite for small payments.

5. The law, that permanent values are determined by cost of production, is applicable only to commodities produced in the same place, or in adjacent places. It is not at all applicable to commodities produced in different places. A country may import from other countries the commodities which it can produce with less cost of production; for supposing it to have advantage over them all in all other productions, it can employ its industry and capital in producing those things in which its advantage was greatest, and import those in which it has least advantage. According to Ricardo, it is not, then, the difference between the absolute costs of production that determines the interchange, but a difference in the comparative costs.

To illustrate the case in which the interchange of commodities will, and in which it will not, take place, let us make the supposition which Mr. Mill, in his *Elements of Political Economy*, makes, that Poland has advantage over England in the production both of corn and of cloth. In the first place, he supposes the advan-

tage to be of equal amount in both the commodities,—the cloth and corn, each of which required 100 days' labour in Poland, requiring each 150 days' labour in England. The cloth of 150 days' labour in England, if sent to Poland, will exchange for cloth only of 100 days' labour in Poland ; if exchanged for corn, therefore, it will exchange for corn only of 100 days' labour in Poland ; but the corn of 100 days' labour in Poland is supposed to be the same quantity with the corn of 150 days' labour in England. With cloth, therefore, of 150 days' labour, England would obtain in Poland as much corn as she could produce at home with 150 days' labour ; and in importing it she would be required to pay cost of carriage besides. In these circumstances, there would be no interchange. The comparative costs of the two articles in both the countries were supposed to be the same, though the absolute costs were different.

It is otherwise when not merely the absolute, but the comparative costs of the two articles, are different in the two countries. If the cloth produced in 100 days' labour in Poland was produced with 150 days' labour in England ; but if the corn produced with 100 days' labour in Poland cannot be produced with less than 200 days' labour in England, an adequate motive for exchange would arise. With the quantity of cloth which England produced in 150 days, she would be able to obtain in Poland the corn produced there with 100 days' labour ; but the corn produced in Poland with 100 days' labour is the same in quantity with corn which England could produce at least in 200 days' labour. England, therefore, with 150 days' labour in cloth, would obtain in Poland the corn which requires 200 days' labour to produce at home. She obtains a profit of 50 days' labour on each repetition of the transaction. It is a profit absolutely, for it is not obtained at the expense of Poland, which obtains with the corn of 100 days' labour as much cloth as would require her the same number of days for producing it. Poland derives no benefit from the interchange. To enable Poland, therefore, to obtain some advantage in the transaction, she should obtain, with corn of 100 days' labour, more cloth than what England could produce in 150 days' labour.

6. *a.* According to the doctrine now stated, the direct economical advantages of foreign commerce consist in the increased efficiency of the productive forces of the world. Setting aside its enabling countries to obtain those commodities which they could not produce at all, its advantage consists in a more efficient employment of the productive resources of the world. If two countries which trade together attempted, as far as was physically possible, to produce for themselves the commodities which they now import from one another, the labour and the capital of the two combined would not be so productive as when each employs itself in producing, both for itself and for the other, commodities in which its advantage is comparatively the greatest. The addition thus made to the produce of the two combined constitutes the advantage of the trade. So, then, the direct advantages, resulting to a country from foreign trade, consist in its import. A country is either enabled to obtain those commodities which it could not have produced at all, or which it must have produced at a greater expense than the cost of the commodities which it exports to pay for them. Therefore, it obtains for the same labour and capital a greater quantity of commodities than it requires, or exactly the same which it requires for a smaller amount, leaving the surplus to be employed in producing something else.

b. But the indirect effects of foreign commerce are still more important. One is the tendency of every extension of the market to improve the processes of production. A country which produces for larger markets than its own, makes use of a more extended division of labour, can make inventions and improvements in the processes of production. Whatever causes a greater quantity of anything to be produced in the same place, tends to the general increase of the productive powers of the world. There is another consideration principally applicable to an early stage of industrial advancement. A people may be in an indolent, quiescent, uncultivated state, with all their desires either fully satisfied, or entirely undeveloped. They may fail to put forth the whole of their productive energies, for want of any sufficient object of desire. The foreign trade, by making them

acquainted with new objects, or inducing them, by the easier acquisition of things which they previously had not thought attainable, sometimes works a sort of industrial revolution in a country, whose resources were not fully developed for want of any sufficient object of desire ; inducing those that were satisfied with scanty comforts, and small work, to work harder, for the gratification of their new tastes, and even to accumulate capital for the still more complete satisfaction of those tastes at a future time.

Again, the moral advantages from foreign commerce are extremely beneficial. Even there is no need to state the beneficial advantages that will result in the present low state of human improvement, by placing persons in contact with those that are perfectly dissimilar to themselves in their notions, manners, and customs, &c. Commerce is now what war was once—the principal source of this contact. Commercial adventurers from different countries have always been the first civilizers of barbarians. Finally, commerce taught one nation to look with good will upon the wealth and prosperity of other nations. Before, the patriot, unless sufficiently advanced in culture, wished all countries poor and miserable except his own. He now sees, in their wealth and prosperity, a direct source of prosperity and wealth to his own.

SHRIDHAR VITHAL.

4. *a.* From an excess of production of some commodities it has been maintained, among others by such distinguished political economists as Malthus, Dr. Chalmers, and M. Sismondi, that there can be a general excess of production ; and they have severally recommended a restraint to multiply population, to put a moral restraint in reference to the pursuit of gain, and the depreciation of machinery. It is not clearly understood, in inculcating this doctrine, which of the two elements of demand they have in view ; whether it is the means of purchase that fall short of the supply, or desirability.

What is it that constitutes the means of purchase ? Only *commodities*. If commodities are doubled, our means of purchase are also doubled. If we have twice as many articles as we had

before, we can buy twice as many things. Besides, if we suppose everything else to be doubled, we must suppose the money as having doubled too. Our means of purchase shall never fall short of the supply.

Let us examine the other part of the question—the desirability falling short of the supply. This cannot be, unless we suppose the wants of every community are quite satisfied. We can suppose the wants of the higher classes to be satisfied, and that they require nothing more ; but are we to suppose the wants of the labourers also satisfied ? A general satiety of the desire of a community is impossible to be supposed. If the wants of the labourers are also satisfied, they would certainly never have laboured to produce more ; for mankind are averse to labour. When he, the labourer, finds himself provided with every necessary article, and every luxury, why will he continue labouring ? He will slacken his labour, and there would be no excess of supply.

It is supposed that they may labour from mere habit ; the machinery is at work, the materials at hand, and the labourers ready to work. The extra profit the capitalist will pay to the labourers, their wages will rise, and they shall discontinue to work as hard, or as much, as before.

b. Thus we see that excess of production of all commodities is merely imaginary. What has given rise to such an “irrational conception” we need not enter into. It will be sufficient to say, that some mercantile phenomena, as the commercial crisis, and the fall of prices, and that of profits, gave rise to it. The commercial crisis was the effect of the fall of credit, while the increase of population, and the increased cost of manufacturing labour, was the cause of the fall of price and profits.

Pr. = $M V + C V$:—Prices are equal to the Money Value, plus the Credit Value. Credit being destroyed, certainly prices will fall.

Pr. = $\frac{D}{S}$:—Prices are also equal to demand by supply. But the fall of prices [in the commercial crisis] is not caused by the excess of supply, but the destruction of one of its elements.

INDUCTION.

THIRD YEAR STUDENTS.

1. Inductive Logic is most important, on account of its surpassing in intricacy all other branches of science, and also on account of its being employed in the investigation of nature. Besides, it is the source of all our knowledge not intuitive.

2. *a.* "Man, the *minister* and *interpreter* of nature, can know and understand as much as his observations on the order of nature, either with regard to things or the mind, lead him, and is incapable of more."

b. According to Whewell, *conception* is the chief essence of induction. The facts exist isolated in nature, but it is the *mind* which connects them, and brings them into a *new point of view*. The pearls are there, but they will not hang together unless some one provides the *string*. Mere collection of facts will never form induction. They require to be seen under a *new point of view*. The conception is supplied from the *mind*, and requires the co-operation of both external nature and the *mind*. Thus man is not merely a *spectator* of nature, but the *interpreter*.

EDALJI SHAPURJI.

c. The ground of induction, according to Mill, is the general uniformity of nature; that the course of nature is constant; or that we believe that what has taken place in certain circumstances will in the future take place under similar circumstances, or that there are in nature *parallel cases*. Stewart calls this propensity of generalising from past to future a principle of our constitution itself. He calls it "our intuitive conviction that the future will resemble the past under similar circumstances." Now this ground of induction, both of Mill and Stewart, is contained in the words "*the order of nature*," which Bacon makes use of in his first aphorism stated above.

d. Bailey says, with respect to the ground of induction stated above, that time, in its modifications of past, present, and future, has no reference with this belief or propensity. We believe that fire will burn to-morrow, because it burned to-day; but we believe as equally that it burned many thousands of years ago,

and that it burns over all the parts of the world. It is not present and past, as such, that we are concerned with ; but it is from the known to the unknown that we are to travel.

3. Some of those that treated the sciences before the time of Bacon merely collected facts, without eliciting any appropriate idea from them ; no collection of facts is ever a science. But there was another class, who went quite the contrary way from the above : they went on evolving ideas out of their own heads, without any material basis to rest upon. The former were the empirists, and the latter the dogmatists. Bacon beautifully represents them by two animals, the *ant* and the *spider*. He says that the empirists, like the ant, heap up and use ; and the dogmatists, like the spider, weave webs out of themselves. But the true investigator must, he says, both collect and digest ; he represents him by the "*bee*, which collects her materials from the garden or the field, and digests them, and turns them into honey by a faculty of her own." So must a true investigator of nature collect facts, elaborate them by his own mind, and return them to the world in their altered form.

4. In common language, any uniformities in nature, which have any connection with each other, are called laws of nature. Thus, if we see that A is followed by D, B by E, and C by F ; then will A B be followed by D E, A C by D F, B C by E F, and A B C by D E F. Now any of these uniformities is called in common parlance a law ; but scientifically speaking, the first three alone, from which the others must follow as a matter of course, are called laws of nature. In this sense, they have reference to the original meaning of the word, viz. a *law-maker* ; and therefore those uniformities which spring spontaneously, without any new [act of] creative will, from certain other uniformities, are not strictly speaking called laws. The general regularity in nature is composed of many minor regularities. It does not mean that the course of nature is always the same—that we will dream the same thing to-morrow which we have dreamed to-day ; neither does it mean that we shall have the same changes in the weather which we have experienced to-day. Mill calls it a web composed of many different kinds of threads.

(b). The word cause means all the assemblage of invariable and unconditional antecedents of a phenomenon ; by the word unconditional we are to mean, requiring no other condition than the one negative, viz. absence of a preventing cause. The causes we are concerned with in induction are not the ontological causes, but we are to use the word here in the sense in which one phenomenon is said to be the cause of another. M. Comte and many others maintain, that we have no idea of a cause ; and it is only the relations of resemblance or similarity that we can know of. On this ground, he abstains from the use of the term cause. But Mill retains it, for three reasons : *first*, he says there are two sorts of uniformities, namely those which are connected by a law of causation, and those which are merely as antecedents and consequents, such as the succession of day and night. In order that these two may not be confounded, he uses the word cause to denote the uniformities of the former kind. *Secondly*, that no word except cause expresses the unconditional relation better ; and that M. Comte himself is obliged to use circuitous language whenever he has to express the idea ; and *thirdly*, that because a certain word is misunderstood, we should not abstain from its use, but, constantly using it in its proper sense, make people understand the real meaning.

5. *a*. The problem of inductive logic being resolved into the finding of the causes of a given effect, or the effects of a given cause, Mill gives four methods for effecting this purpose, namely, the *method of agreement*, the method of *difference*, the method of *residues*, and the method of *concomitant variations* : by the combination of the first two, there arises a fifth, which he calls the *indirect method of difference*.

In the method of agreement we compare many instances of the phenomenon, and see in what they agree ; and the circumstance in which alone all the instances agree we call the cause, or effect, of the phenomenon. The maxim upon which it is founded is the obvious one, that whatever can be eliminated without any prejudice to the phenomenon is not connected with it as a cause.

In the second method, we take only two instances, as much

resembling each other as we can, in one of which the phenomenon occurs, and in the other it does not occur ; and the circumstance in which alone these two instances differ is concluded to be the cause or the effect of the phenomenon. Where we cannot fulfil the rigorous conditions of the method of difference in two instances, we compare many instances in which the phenomenon occurs, and find out in what they agree. Then we take another set of instances, in which the phenomenon does not occur, and see if they agree only in the absence of the circumstance which was present in the first set ; and we conclude that this circumstance is the cause. Of the three methods mentioned, the method of difference is the most potent instrument in the investigation of nature.

In the method of residues, we subduct from the phenomenon what part of it can be ascribed to some of the antecedents, and the remainder of the effect is due to the remainder of the antecedents.

In the last, if a phenomenon varies in any manner when a certain other phenomenon varies, these two phenomena are connected by causation.

The conclusions drawn from the method of agreement are rendered doubtful, in consequence of an imperfection which that method labours under ; I mean the plurality of causes.

(*b*). The 1st stage is the ascertainment of the laws of the separate causes by means of Induction ; 2nd, Ratiocination, that is to calculate what effect a certain combination of separate laws will produce ; 3rd, Verification, that is, seeing whether our calculated effect agrees with the reality of nature.

6. There are three modes of explaining the laws of nature ; they are called, 1st, Resolution ; 2nd, Interpolation ; and 3rd, Subsumption. We are said to explain one law by another according to the 1st method, when we find a more general law from which it is deducible, and of which it is merely a case ; 2nd, when we find an intermediate link between what are called the cause and its effect ; and 3rd, when we collect many laws, and view them as cases of a grand and general law. In all these ways, the laws by which we explain are more general, and subject to fewer exceptions.

(b). The limit, according to Mill, to the explanation of the laws, is the number of our distinguishable sensations ; distinguishable not merely in degree, but in kind. Some say that this process can be carried on until we have explained all laws by one ultimate law ; this is the one extreme : the other is that which Comte countenances, by saying that an attempt to reduce the several colors peculiar to each substance is essentially illusory.

7. (a). In explaining the laws of nature, we sometimes find it expedient to make a supposition ; and hence we are led to the making of hypotheses. An hypothesis is any supposition which we make, in order to deduce from it uniformities which are known to be true ; and the proper use of them is to assure us in what circumstances we are to trust to an explanation given of any uniformity. Hypotheses are used to enable us to employ the deductive method sooner than is legal.

(b). An hypothesis is legitimate, when it is of such a nature that the verification would amount to a complete induction that the thing supposed would be certainly proved or disproved ; such an hypothesis was that which Newton proposed, in order to ascertain the law of the gravitating force of the solar system.

Where this proviso cannot be fulfilled, the hypothesis is illegitimate ; that is, when the cause supposed is not capable of being proved by another way : such an hypothesis was that which Des Cartes made with regard to the motion of the heavenly bodies, and the two hypotheses respecting light.

GANESH DHONDEVA.

MATHEMATICS AND NATURAL PHILOSOPHY.

FIRST YEAR STUDENTS.

$$1. \quad \tan \frac{1}{2} a \tan \frac{1}{2} b = - \frac{\cos S}{\cos (S - C)} .$$

Taking the reciprocals of these two,

$$\frac{1}{\tan \frac{1}{2} a \tan \frac{1}{2} b} = \cot \frac{1}{2} a \cot \frac{1}{2} b = - \frac{\cos (S - C)}{\cos S} .$$

Developing $\cos (S - C)$ we have,

$$\begin{aligned} &= \frac{-\cos S \cos C - \sin S \sin C}{\cos S} \\ &= -\cos C - \tan S \sin C. \end{aligned}$$

Transposing $\cos C$ and dividing by $\sin C$,

$$\frac{\cot \frac{1}{2} a \cot \frac{1}{2} b + \cos C}{\sin C} = -\tan S.$$

The spherical excess of a triangle is $= (\Lambda + B + C - 180^\circ)$; or, putting $2S$ to denote the sum of the angles, it is equal to $2S - 180^\circ$.

Representing the spherical excess by D , we have $\frac{1}{2} D = S - 90^\circ$; $\cot \frac{1}{2} D = \cot (S - 90^\circ) = \tan (180^\circ - S) = -\tan S$. Now, as the S in the formula I have deduced above is also half the sum of the angles, we can substitute the value of $-\tan S$ just found, in the above formula.

$\cot \frac{1}{2} D = \frac{\cot \frac{1}{2} a \cot \frac{1}{2} b + \cos C}{\sin C}$; in which a and b are the sides, and C the contained angle.

$$3. \quad \sin \Lambda + \sin 2 \Lambda + \sin 3 \Lambda + \dots + \sin n \Lambda.$$

Multiply this by $2 \sin \frac{1}{2} \Lambda$.

$$2 \sin \frac{1}{2} \Lambda S = 2 \sin \Lambda \sin \frac{1}{2} \Lambda + 2 \sin 2 \Lambda \sin \frac{1}{2} \Lambda + 2 \sin 3 \Lambda \sin \frac{1}{2} \Lambda + \dots + 2 \sin n \Lambda \sin \frac{1}{2} \Lambda.$$

$$\text{Now, } 2 \sin \Lambda \sin \frac{1}{2} \Lambda = \cos \frac{1}{2} \Lambda - \cos \frac{3}{2} \Lambda;$$

$$2 \sin 2 \Lambda \sin \frac{1}{2} \Lambda = \cos \frac{3}{2} \Lambda - \cos \frac{5}{2} \Lambda;$$

$$2 \sin 3 \Lambda \sin \frac{1}{2} \Lambda = \cos \frac{5}{2} \Lambda - \cos \frac{7}{2} \Lambda;$$

$$2 \sin n \Lambda \sin \frac{1}{2} \Lambda = \cos (n - \frac{1}{2}) \Lambda - \cos (n + \frac{1}{2}) \Lambda.$$

Adding these together, and putting S for the sum, we have,

$$2 \sin \frac{1}{2} \Lambda S = \cos \frac{1}{2} \Lambda - \cos (n + \frac{1}{2}) \Lambda$$

$$\therefore S = \frac{\cos \frac{1}{2} \Lambda - \cos (n + \frac{1}{2}) \Lambda}{2 \sin \frac{1}{2} \Lambda}$$

5. Let the given quadratic be of the form $A_2 x_2 + A x = N$. The analysis of this degree of equations is effected without

the aid of Sturm's Theorem ; so that, taking it for granted that the first figure of a root is known, I proceed to show how the remaining figures may be evolved one after another.

Let us call this first figure r , and represent the other figures by r', r'', r''' &c. ; the sum of which let us represent by x' ; r is such a figure, that if it be divided by $A_2 r + A$, the quotient, or at least the first figure of it, will be r . Substituting $x' + r$ for x , we get

$$\begin{array}{r} A_2 x'^2 + 2 A_2 r x' + A_2 r^2 \\ \quad \quad \quad A x' + A r \\ \hline A_2 x'^2 + (2 A_2 r + A) x' + A_2 r^2 + A r = N. \end{array}$$

For brevity's sake, let us write this in the following form :—

$$A_2 x'^2 + A' x' = N'.$$

It is evident [that the] first figure of a root of this equation is the second figure of a root of the original. Let us, as was formerly said, call this r' ; then r' is such a number, that when N' is divided by $A_2 r' + A'$, the first figure of the quotient, that is the second figure of a root of the original quadratic, will be $r'..$

For $A_2 r'^2 + A' r$ is nearly equal to N' ; and consequently, when it is divided by $A_2 r' + A'$, the quotient must be r' . If, therefore, we could find the value of $A_2 r' + A'$, we will have a method by which we can find out r' . But it is impossible that we can know the whole of it ; for, as we see, it involves r' . But reflecting what the relation is between A' and $A_2 r'$, we find that it is more than ten times greater than $A_2 r'$. Therefore, if we divide it by A' , we can get r' , as A' forms a large portion of the divisor. If it give a number greater than r' , by finding the value of $A_2 r' + A'$, we can know whether it is greater. After having got this r' , substitute $x'' + r'$ for x' , and you will get an equation, the first figure of whose root will be the third figure [of that] of the original quadratic ; and this third figure we can find by taking the last but one coefficient of the equation involving x'' as a trial divisor, as it will form a large portion of the true one.

These substitutions of $x' + r$ for x &c, are nothing more

than transformations of the original equation; and thus we have a method for solving quadratics.

RAMKRISHNA GOPAL.

SECOND YEAR STUDENTS.

1. *a.* Let A B be the fixed line, O the given point ($x' y'$) and P ($x y$) the point whose locus is required. (See Fig. 1.)

Now let A B be the axis of x , and O C, the perpendicular on it from O, be the axis of y ; draw P M perpendicular to A B from P; then P M = y . The distance O P between the points O ($x' y'$) and P ($x y$) is $\sqrt{x^2 + (y - y')^2}$

\therefore by the conditions of the question,

$$\frac{O P}{P M} = \sqrt{\frac{x^2 + (y - y')^2}{y^2}} = e,$$

$$\frac{x^2 + (y - y')^2}{y^2} = e^2$$

$$x^2 + y^2 - 2 y y' + y'^2 = e^2 y^2$$

$$(1 - e^2) y^2 + x^2 - 2 y y' + y'^2 = 0.$$

This is the equation to the locus; and as it is an equation of the second degree, the locus must be a curve of the second order. Now it is evident that the locus is not a circle; because the coefficients of y^2 and x^2 are not equal; \therefore it must be either an ellipse, hyperbola, or a parabola.

b. I have proved above that the locus is confined to ellipse, hyperbola, and parabola. Now which of these three shall be the locus will depend on the value of e ; because in the case of the ellipse ($b^2 - 4 a c$) must be negative; in that of hyperbola it must be positive; and in that of parabola it must be nothing. Now in the general equation of the second degree, b is the coefficient of the term containing the product of x and y ; a is the coefficient of y^2 , and c that of x^2 ; while in the equation of the locus here found out, there is no term containing the product of x and y ; $\therefore b = 0$; and instead of a we have in the equation here found out $(1 - e^2)$, and instead of c , we have here 1. Substituting these in $(b^2 - 4 a c)$, we get it equal to $0 - 4(1 - e^2) = 4 e^2 - 4$. Now this expression will be nothing,

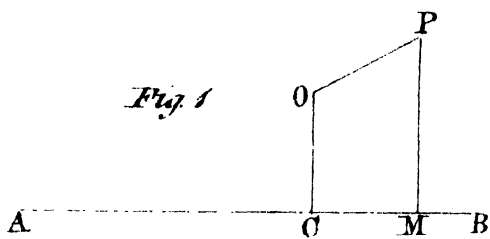
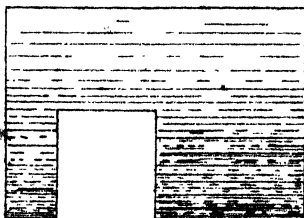


Fig. 2



if $e = 1$, positive if $e > 1$, and negative if $e < 1$; \therefore when $e = 1$ the locus is a parabola; when $e > 1$ the locus is a hyperbola; and when $e < 1$ the locus is an ellipse.

BAL GOVIND.

3. *a.* Let B A M be a circle. Now let the extremity of a thread be unwound from the axis; the extremity of the thread will trace a curve, called the involute of a circle.

The successive branches of the thread are separated by a distance equal to the circumference of the circle.

Now I shall proceed to find its equation.

Let $CP = r$, $PCA = \theta$, and $CA = a$.

The extremity of the thread is unwound from A, $BP = BA$. BP is also a tangent. Now $BC = CP \times \cos BCP$; \therefore

$$BCP = \cos^{-1} \cdot \frac{a}{r}, \quad BP = BA = a (\cos^{-1} \cdot \frac{a}{r} + \theta);$$

$$\text{also } BP = \sqrt{r^2 - a^2}; \quad \therefore (\cos^{-1} \cdot \frac{a}{r} + \theta) = \frac{\sqrt{r^2 - a^2}}{a};$$

$$\therefore \theta = \frac{\sqrt{r^2 - a^2}}{a} - \cos^{-1} \cdot \frac{a}{r}. \quad \text{This is the equation to the involute.}$$

b. The employment of this involute is in the mechanical arts; for instance, in the toothed wheels of watches and clocks, in the piston-rods of air-pumps. The reasons which make the employment of the involute in machinery are, *1st*, because the force, whatever it may be, acts directly in the direction of the tangent, and thus no part of the force is lost; and *2nd*, the machinery remains safe from shocks, and friction, for the force acts in a direction exactly tangential.

HORMAZJI DADABHAI.

4. *a.* A solid immersed in a fluid sustains an upward pressure equal to the weight of the fluid it displaces. Pressure equal in all directions being the fundamental law of fluid pressure, the fluid displaced was acted upon by the surrounding portions with a force equal to its own weight. Now the solid

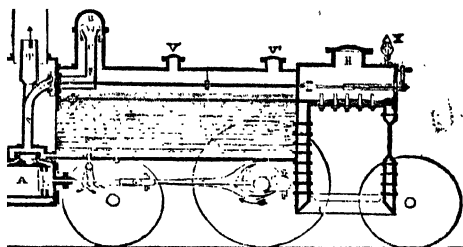
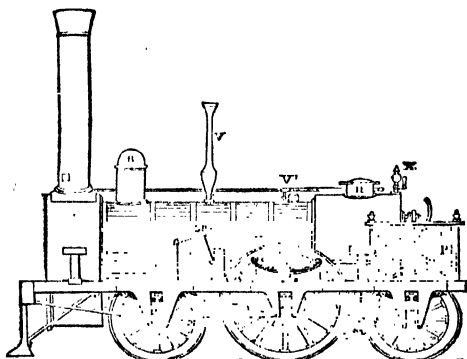
has taken its place, it must support the same amount of pressure which the fluid displaced sustained.

JAGANNATH NARAYAN.

6. Yet a body specifically lighter than a fluid may be kept at the bottom of the vessel by the pressure of the fluid, if no water were allowed to remain between the bottom of the containing vessel and the part of the body which touches the bottom. Supposing the body being so put in the vessel that no water may remain between the resting part of the body and the bottom of the vessel, it is quite evident, that there being no pressure of water from below to counteract the pressure of water from above, the solid will remain at the bottom of the vessel.

MANCHERJI BERAMJI.

5. a. The most important parts of the Railway Locomotive Engine may be briefly stated.



The boiler has inside it hollow tubes, through which the flame plays, and heats the water sooner than it would otherwise do; a handle connected with a rod, which regulates the admission of steam; X, a sort of bell, through which the shrill is produced; V', a safety-valve, acted by a spring; V is also another safety-valve; B, the steam-dome; S, the steam-pipe; A, the steam cylinder worked by a piston; the slide-valve; P, the feed-pipe, worked by a pump, connected with the piston-rod.

JAGANNATH NARAYAN.

The more important parts of the railway locomotive engine are—*1st*, the regulator, by which steam can be regulated to go into the slide-valve box, and thence into the cylinders; *2nd*, the eccentric wheels and rods, for changing the position of the slide-valves, thereby changing the motion of the engine; *3rd*, the steam cylinders, with the pistons and piston-rods, joined with the beams, which are joined with the cranks, to the axles of which are fixed the wheels to be turned; *4th*, the damper, by which a current of air may be made to pass rapidly or slowly over the fire, thereby regulating the heat necessary for the production of steam in tubular boiler. This boiler has holes bored through two opposite sides, and tubes of brass pass through the bores lengthwise. This invention was that which got Stevenson, its inventor, a handsome prize, and without which the locomotive could not have been successfully used. The furnace is put into the body of the boiler, as represented in the figure (see Fig. 2), where the shaded parts represent water. The draft goes through the tubes, thereby heating the water round it, and thus no portion of the heat is lost; *5th*, the pump, which is worked by the horizontal motion of the piston-rod, and by which a constant stream of water is made to force itself into the boiler; *6th*, the safety-valve, a most essential part of the locomotive, by which any accident of the bursting of the boiler by the great elastic force of the steam may be averted; *7th*, the steam-whistle, for giving a signal of its approach. This is a metallic hollow bell, perforated with small holes, or a very fine slit, through which steam, getting out with a great force, makes the peculiar noise.

MANJERJI BERAMJI.

THIRD YEAR STUDENTS.

2. (a). The equation to the ellipse is

$$a^2 y^2 + b^2 x^2 = a^2 b^2 ; \therefore x^2 = a^2 - \frac{a^2 y^2}{b^2}$$

$$\therefore x^2 = a^2 \left(1 - \frac{y^2}{b^2} \right) ; \text{ also } y^2 = N^2 \sin^2 \lambda$$

$$\text{But } N^2 = y^2 + \frac{b^4 x^2}{a^4} = \frac{b^4 x^2}{a^4} + y^2 ;$$

$$\therefore N^2 = \frac{b^4}{a^2} \left(1 - \frac{N^2 \sin^2 \lambda}{b^2} \right) + N^2 \sin^2 \lambda$$

$$\therefore N^3 \left\{ 1 - \sin^2 \lambda \left(1 - \frac{b^2}{a^2} \right) \right\} = \frac{b^4}{a^2}$$

$$\therefore N = \frac{b^2}{a} \cdot \frac{1}{(1 - e^2 \sin^2 \lambda)^{\frac{1}{2}}}$$

$$\text{But } r = \frac{a^2}{b^4} N^3$$

$$\begin{aligned} \therefore r &= \frac{a^2}{b^4} \cdot \frac{b^6}{a^3} \cdot \frac{1}{(1 - e^2 \sin^2 \lambda)^{\frac{1}{2}}} = \frac{b^2}{a} \cdot \frac{1}{(1 - e^2 \sin^2 \lambda)^{\frac{1}{2}}} \\ &= \frac{a^2 (1 - e^2)}{a (1 - e^2 \sin^2 \lambda)^{\frac{1}{2}}} \\ &= a \frac{(1 - e^2)}{(1 - e^2 \sin^2 \lambda)^{\frac{1}{2}}} \end{aligned}$$

(b). Let M = length of a degree at the latitude L , and m = length of a degree at the latitude l ; let also R = radius of curvature at the middle point of M ; and r at that of m .

$$R : r :: M : m ; \therefore R m = M r.$$

$$\text{But } r = \frac{a (1 - e^2)}{(1 - e^2 \sin^2 l)^{\frac{1}{2}}} ; \text{ and } R = \frac{a (1 - e^2)}{(1 - e^2 \sin^2 L)^{\frac{1}{2}}}$$

$$\therefore \frac{M}{(1 - e^2 \sin^2 l)^{\frac{1}{2}}} = \frac{m}{(1 - e^2 \sin^2 L)^{\frac{1}{2}}} . \text{ Or,}$$

$$M^3 (1 - e^2 \sin^2 L) = m^3 (1 - e^2 \sin^2 l) .$$

$$M^{\frac{2}{3}} - e^2 M^{\frac{2}{3}} \sin^2 L = m^{\frac{2}{3}} - m^{\frac{2}{3}} e^2 \sin^2 l.$$

$$e^2 (m^{\frac{2}{3}} \sin^2 l - M^{\frac{2}{3}} \sin^2 L) = m^{\frac{2}{3}} - M^{\frac{2}{3}}.$$

$$e^2 = \frac{m^{\frac{2}{3}} - M^{\frac{2}{3}}}{(m^{\frac{2}{3}} \sin^2 l - M^{\frac{2}{3}} \sin^2 L)}; \therefore e = \sqrt{\frac{m^{\frac{2}{3}} - M^{\frac{2}{3}}}{(m^{\frac{2}{3}} \sin^2 l - M^{\frac{2}{3}} \sin^2 L)}}$$

$$(c). \quad r \ 3.1416 = 180 \ m ; \therefore r = \frac{180 \ m}{3.1416}$$

$$\therefore \frac{180 \ m}{3.1416} = \frac{a (1 - e^2)}{(1 - e^2 \sin^2 l)^{\frac{3}{2}}};$$

$$a = \frac{180 \ m (1 - e^2 \sin^2 l)^{\frac{3}{2}}}{(1 - e^2) 3.1416}$$

Writing the value of e^2 in the above, we get the value of a and b .

GANESH DHONDEVA.

$$3. \quad \int \frac{dx}{x^4 (a + b x^2)} = - \int \frac{z^4}{a z^2 + b} = - \int \frac{\frac{1}{a} z^2 \left(z^2 + \frac{b}{a} - \frac{b}{a} \right)}{z^2 + \frac{b}{a}},$$

by putting $x = \frac{1}{z}$;

$$\therefore \int \frac{dx}{x^4 (a + b x^2)} = - \int \frac{1}{a} z^2 + \int \frac{\frac{b}{a^2} z^2}{z^2 + \frac{b}{a}};$$

$$\begin{aligned} \text{But } \int \frac{\frac{b}{a^2} z^2}{z^2 + \frac{b}{a}} &= \int \frac{\frac{b}{a^2} \left(z^2 + \frac{b}{a} - \frac{b}{a} \right)}{z^2 + \frac{b}{a}} = \int \frac{\frac{b}{a^2} \left(z^2 + \frac{b}{a} \right) - \frac{b^2}{a^3}}{z^2 + \frac{b}{a}} \\ &= \int \frac{b}{a^2} - \int \frac{\frac{b^2}{a^3}}{z^2 + \frac{b}{a}} \end{aligned}$$

$$- \int \frac{b^2}{a^3} \div \left(z^2 + \frac{b}{a} \right) = - \int \frac{\frac{b^2}{a^2}}{a z^2 + b} = - \int \frac{\frac{b}{a^2}}{\frac{a}{b} z^2 + 1}$$

$$= -\frac{b}{a^2} \sqrt{\frac{b}{a}} \int \frac{\sqrt{\frac{a}{b}}}{\frac{a}{b} z^2 + 1} = -\frac{b}{a^2} \sqrt{\frac{b}{a}} \tan^{-1} \sqrt{\frac{a}{b}} z$$

$$\therefore \int \frac{dx}{x^4 (a + b x^2)} = -\int \frac{1}{a} z^2 + \int \frac{b}{a^2} - \frac{b}{a^2} \sqrt{\frac{b}{a}} \int \frac{\sqrt{\frac{a}{b}}}{\frac{a}{b} z^2 + 1}$$

$$= -\frac{z^3}{3a} + \frac{bz}{a^2} - \frac{b}{a^2} \sqrt{\frac{b}{a}} \tan^{-1} z \sqrt{\frac{a}{b}}$$

Restoring x , we have,

$$\int \frac{dx}{x^4 (a + b x^2)} = -\frac{1}{3a x^3} + \frac{b}{a^2 x} - \frac{b}{a^2} \sqrt{\frac{b}{a}} \tan^{-1} \frac{1}{x} \sqrt{\frac{b}{a}}$$

MOTILAL JIVANDAS.

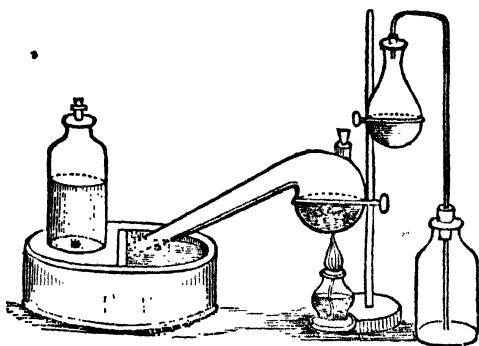
CHEMISTRY.

FIRST YEAR STUDENTS.

5. Oxygen exists abundantly in nature, forming eight-ninths of the water upon our globe, and one-fifth of the air which surrounds it, mechanically mixed with nitrogen especially. In the solid crust of our earth, it exists as an ingredient of salts, as carbonates, sulphates, silicates, nitrates, &c. It is one of the constituents of organic matter. It exists in our body in the phosphates, &c. it contains. In short, it has been estimated to form half of the inorganic, and more than half of the organic matter existing on the earth.

It may be prepared by heating red oxide of mercury in a flask over an argand lamp, and may be collected in a manner which I will describe in connection with another mode of obtaining it.

Red oxide of mercury being too expensive to allow of frequent experiments being made with oxygen, is not used in the laboratory for that purpose, though it readily parts with its oxygen. Chlorate of potash is generally employed. To prepare oxygen from it, put a quantity of it in a flask, together with a little per-oxide of manganese, which facilitates the evolution of the gas, and hold it over the flame of an argand lamp.



After a time, the salt will begin to darken in colour, and will be transformed into a clear liquid, when it will begin to effervesce, and part with its oxygen. The latter will go through the tube attached to the flask by means of a perforated cork, and may be collected over the pneumatic trough as follows :—Fill the trough with water ; place a jar, also filled with water, over the aperture of the stool in it, and arrange the tube attached to the flask in such a way that its extremity may be directly below the aperture of the stool. After the jar is filled with oxygen, remove it from the trough by means of a tray filled with water.

The oxygen is now ready to be experimented upon, in order that its properties should be ascertained. The density of the gas is about 11045, compared with air 10000. It supports and enlivens combustion, as may be observed by burning any combustible substance in it ; it is essential to the support of animal life. It forms many compounds, possessing acid and basic properties.

Oxygen may also be prepared by heating per-oxide of manganese.

Chlorate of potash contains six equivalents of oxygen, which are given off, and chloride of potassium remains in the flask.

6. The electrical machine being turned round, positive electricity will be excited in the glass plate, and negative in the silken rubbers, which are connected with the ground in order that negative electricity may be carried off there. The plate

induces negative electricity in the part of the main conductor nearest to it, and positive at the remote end. The negative electricity accumulates in the points with which the main conductor is furnished, and, combining with the positive of the glass plate, effects neutralization, while the main conductor is wholly excited with positive electricity. A second turn of the glass plate is attended with the like effect ; and thus a very high positive charge may be given to the main conductor. Electricity may be transferred from the main conductor to the Leyden jar, by establishing a connection between the two.

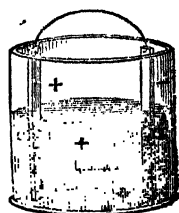
RAMKRISHNA GOPAL.

1. The characteristic properties of acids are as follows :— They change vegetable blues to red, and vegetable browns to yellow, and combine with bases to form salts. In illustration of the first property, the following experiment may be tried :—Take an infusion of litmus in a glass tube, and add to it a few drops of sulphuric or nitric acid, either of which will render the solution red. Take a little quantity of powdered turmeric, or medicinal rhubarb, and, after it has been dissolved in water, add a little quantity of potass or soda, either of which will render the liquid brown ; and if we add a few drops of any strong acid to the prepared solution, it will immediately restore its colour, or, in other words, render it yellow. The third property can be manifested by putting any base, such as potass or soda, in sulphuric or nitric acid. In the first case KOSO_3 and in the other case NaONO_5 will be formed. There is a fourth property of acids, namely they have a very sour taste. This property can be examined with very dilute acid, when its characteristic taste can be observed. Care must be taken that the acid must be very dilute, otherwise it will immediately corrode the tongue. The characteristic properties of bases are, that they change vegetable reds to blue, and yellows to brown, and combine with acids to form salts. The salts which the acids and bases form by combination with each other are called oxygen acid salts ; for instance, sulphate of soda (Na_2OSO_3), nitrate of potass (KONO_5), and many other important series of salts.

SOKAR BAPUJI.

SECOND YEAR STUDENTS.

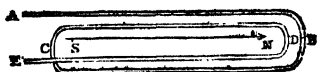
3. The necessary elements of a simple Voltaic Circle are two solid elementary substances, and one liquid compound, which has a great affinity for one of the solids, and the least for the other, and that it be a good conductor of electricity. Taking a zinc plate and a copper plate for the two solid elementary substances, and dilute hydrochloric acid for the liquid, the chemical conditions of these elements will be as follows, when contact is made between the two plates : z being a zinc plate, and c a copper plate, both dipped in a vessel containing dilute hydrochloric acid, and, kept in contact at the top, the chemical condition of the zinc plate will be, that it will be acted upon by the acid ; the chlorine of the hydrochloric acid (HCl) will combine with the zinc, forming a soluble chloride of zinc ($ZnCl$), while the copper plate will remain unacted. The hydrogen liberated by the decomposition of the hydrochloric acid will combine with the chlorine of an atom adjacent to it, and liberate its hydrogen ; that in its turn will combine with the chlorine of the next atom of hydrochloric acid, and liberate its hydrogen ; and so on, till the last atom of hydrochloric acid in contact with the copper plate will be decomposed, and the hydrogen given off at that plate. Thus we see that the liquid is in a state of combination and decomposition, although unseen.



Such are the chemical conditions of the elements of the simple voltaic circle : its electric conditions are, that while zinc is dissolved by the acid, the union causes the part dipped in the liquid to be positively electrified, and that portion induces a negative electricity in the part out of the acid. The positively electrified condition of the zinc repels the positive electricity of the liquid, and attracts the negative. Thus we see that a positive current is established from the zinc to the copper, and a negative from the copper to the zinc. The electric conditions of copper are, that it is negative in the liquid, and positive out.

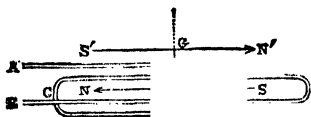
4. The ordinary Galvanometer consists of a magnetised needle, supported on a pivot, and a coil of a conducting wire laid round

it. Its action is, that if a current of electricity be made to pass round the conducting wire, the needle will be deflected, and brought at right angles with its meridian. If the current passes from above, the needle deflects one way, and if we send a current of electricity from below, the needle will be deflected to the other side. Thus, if the current goes from A round to E, the end S will go behind us, and the end N will come out on our side. If the current passes from E to A, the contrary effect will be produced.



MANCHERJI BERAMJI.

1. The ordinary Galvanometer consists of a wire (A B C D E) wound in an elliptical form, or like an helix, and a magnetic needle suspended inside it, in the direction of the wire, by a fine thread. When the two ends (A E)



of the wire are connected with the electrodes of a galvanic battery by means of a metallic communication, or dipped into two vessels containing mercury, wherein the electrodes are also immersed, the electricity traversing the wire makes the needle deflect, which indicates the intensity of the electricity. When a needle is placed along the side of a wire through which electricity passes, the needle dips, but if placed *above* or *beneath*, and *along* the side, the needle places itself across and at right angles to the wire, or rather at right angles to the axis of the wire ; but in each case the poles are reverse of the other. Now the galvanometer being nothing else but a number of wires wound one above another, having no connection with each other, the needle deflects, and the deflection is great or little, according as the intensity of the electricity evolved in the battery, and traversing the wire, is great or little. Another needle connected with the one within the wire by a thread, and whose poles are of opposite kinds to those of the inside, and which is kept in the same direction (the poles being opposite), indicates the deflection.

Here there is no necessity of keeping the galvanometer, or rather the helix, in the direction of the magnetic meridian, for the mutual attraction of the opposite kinds of poles of the needles keeps them, when no electricity traverses the wire, in the direction in which the wires are originally placed.

JAGANNATH NARAYAN.

BOTANY.

THIRD YEAR STUDENTS.

1. An embryo and a leaf-bud, considered in point of their anatomical structure, have a close resemblance : the former may be called a young plant, composed of cellular tissue, produced within the seed by the agency of the sexual organs ; it is enclosed within the cotylidons, which may be compared to rudimentary leaves. We find the same structure in the leaf-bud : it is a small body of cellular tissue, capable of development, enclosed within scales, which, like the cotylidons of the embryo, are nothing but rudimentary, undeveloped leaves. Now, when we put the seed into the earth, among circumstances favourable to its growth, the vital principle begins to operate, and the embryo tends simultaneously in three directions—upwards, downwards, and horizontally. The ascending system is called the plumule, the descending the radical, and the horizontal the medullary system. In the first part of the growth, when it is unable to absorb its food from the soil, it is fed by the contents of the cotylidons, providentially provided for the young plant. In the mean time, the plant grows, and is able, when the contents of the cotylidons are over, to draw its nourishment from the soil. The leaf-bud also grows in the same manner : the small body within the scales begins to grow from its central point, corresponding to the crown, or collar of the embryo, in opposite directions, and the scales develop themselves in the form of leaves. Thus the branch, which is the development of a leaf-bud and a plant, which is the development of an embryo, are the same thing.

3. Plants derive their food from the air and soil, in form of carbonic acid, ammonia, and water, as well as phosphoric acid,

sulphuric acid, oxides of iron and copper, chlorides of sodium and potassium, soda, and potash. Plants absorb these by their roots, as well as leaves. The alkaline and the metallic compounds they take in the form of soluble salts; ammonia is taken by the roots from the soil, and by the leaves through the atmosphere; carbonic acid is taken in the same way, but the quantity taken from the atmosphere by the leaves is immensely large in comparison to what is taken by the roots, the latter of which is also supposed to pass undigested through the leaves. All these inorganic compounds are manufactured into organic substances in the cellular tissue (parenchyma) of the leaves, or the bark, under the influence of light, cells being the only organs which can bring about a change of substance. When the sap has reached the leaves or the bark, and there exposed to light, the carbonic acid, ammonia, and water are decomposed; the plant keeps the carbon, the hydrogen, and nitrogen, for its own use, in the form of different kinds of secretions, and gives off the oxygen. The presence of light is essentially necessary for this manufacturing process, which is called assimilation. Where this last condition (the presence of light) is not fulfilled, the oxygen accumulates in an undue proportion, and the plant dies.

5. The materials of growth, which I have mentioned above, besides water, carbonic acid, and ammonia, are not required by plants equally: some ingredients of the soil are more peculiarly adapted for the nourishment of one plant rather than another. This has led to the necessity for a "rotation of crops." If we sow the same kind of plant in the same soil year after year successively, we shall soon exhaust it of that ingredient which the plant peculiarly requires in a great quantity, and thus, after a few years, we shall have but a poor and scanty crop of that plant. But if we sow one kind of plant this year, and the next year another kind, which does not require the ingredient required by the first, and the third year a third plant, which requires neither of the ingredients required by the first two, and so on, we shall leave ample time for the agencies of heat and cold to disintegrate the soil, and to replenish it with the ingredient required by our first crop, which can now be sown upon it with advantage.

The guano is the fossil dung of some sea-birds which live upon fishes in Africa. It contains a great quantity of phosphate of lime and sand, together with many other organic matters, and ammonia. Now the cerealia require a great quantity of silica for their stocks, and a great quantity of the phosphate of lime for the grain. The guano replenishes the soil with these two ingredients as fast as the plants exhaust it.

GANESH DHONDEVA.

5. Different plants require different kinds of alkaline salts for their nutrition, as lime for potatoes, potash and phosphates for wheat, barley, &c. Now when a crop of a certain plant is sown in a field, it absorbs from the soil the particular ingredient necessary for its growth, and by frequent sowing of the same plant the soil is exhausted of this particular ingredient, till at last it becomes unfit for the production of this plant. Still the soil has other salts or ingredients which are necessary for the growth of other plants, consequently those plants are sown in succession. Now this obviates the necessity of keeping the soil fallow after the growth of the first plant. The same soil gives fertile growth to different plants in succession, instead of producing the same plant at a disadvantage. This led to the necessity for a "rotation of crops."

Now cerealia particularly require phosphates for their growth, and consequently, when sown, they will exhaust the soil of its phosphates, and weaken its power for their growth. Cerealia will be sown at a great disadvantage on that soil, and consequently will lead to the rotation of crops. But in order to obviate this necessity, if you were to put manure containing phosphates and other ingredients, necessary for cerealia, on that soil, the soil will regain its original strength, and will become capable of giving fertile growth to the crop. Such a manure is guano. It is the excrement of a kind of bird, and abounds in phosphates and other ingredients necessary for cerealia.

EDALJI SHAPURJI.

[N. B.—The Professors do not hold themselves responsible for the foregoing Answers, which are given merely as specimens, and, consequently, with their imperfections.]

APPENDIX F.

List of Students on the 1st of January 1854, with the subsequent Changes.

Year.	Scholar-ship.	Stipend.	No.	NAME.	REMARKS.
FOURTH.	1st Normal.	Rs. 30 {	1	Balcrishna Sadashiva	Master, Government English School, Sholapoor.
			2	Bhairaonath Mangesh	Assistant Master, Elphinstone Institution.
			3	Fardunji Jamshedji	Joined the Class of Surveyors & Builders in the Chief Engineer's [Office.
	2nd Normal	20 {	1	Harishankar Balcrishna	{ Assistant Masters, Elphinstone Institution.
			2	Kahandas Tapidas	{
			3	Lalakchand Manekchand	{ Unemployed.
			4	Mahadeji Vasudeva	{
			5	Naoroji Beramji	Sick at the time of the Scholarship Examination.
			6	Ganpat Madanji	Clerk in the Savings' Bank.
			7	Ganesh Dhondeo	Obtained First Normal Scholarship.
THIRD.		{	1	Edalji Shapurji	Obtained First Normal Scholarship.
			2	Motilal Jivandas	Tutor to His Highness the Rao of Kutch's sons,
			3	Pandurang Balibhadra	Joined Fourth Year Class, as a Free Student.
			4	Somnarayan Nandnarayan	{ Obtained First Normal Scholarships.
			5	Mahipatram Ruparam	{
	West.	15 {	6	Ganpatrao Bhaskarji	Clerk in the Military Board Office.

SCHOLARS.

Year.	Description.	No.	NAME.	REMARKS.
SECOND.		1	Gopinath Sadashiva	Joined Third Year Class, as a Free Scholar.
		2	Framji Temulji	Clerk in the Military Board Office.
		3	Hardram Anupram	Unemployed.
		4	Madhavarao Kanoba	Unemployed.
		5	Phirozsha Meherjibhai	Editor and Manager, Bombay Samachar Office.
		6	Ramdas Bhanji	Joined Third Year Class, as a Free Student.
		7	Ramcrishna Gopal	{ Obtained West Scholarships.
		8	Murlihar Girdhar	
		9	Tribhuvandas Dwarkadas	{ Student in the Grant Medical College.
		10	Edaji Nasarvanji	
FIRST.	Free Students.	11	Vinayak Narayan	{ Obtained West Scholarships.
		12	Javerilal Umiashankar	
		13	Fardunji Beramji	{ Joined Second Year Class, as a Free Student.
		14	Dadabhai Pestanji	
		15	Shamrao Bhaskar	{ Obtained a West Scholarship.
		16	Rustamji Maneoji	
		17	Mancherji Bamanji	{ Joined Second Year Class, as Free Scholars.
		18	Beramji Naorozi	
		19	Sakar Bapuji	{ Joined the Class of Surveyors & Builders in the Chief Engineer's Office.
		20	Damodar Mayaram	
		21	Raghunath Janardhan	Unemployed.
		22	Nasarvanji Jamsaji	Joined Second Year Class, as a Free Scholar.
		23	Kavazji Hirjibhai	{ Joined Second Year Class, as Free Students.
		24	Jamshedji Palanji	
		25	Nanek Balaji	Joined Second Year Class, as a Paying Student.
		26	Rustamji Sorabji	Joined Second Year Class, as a Free Scholar.

UNEMPLOYED		THIRD.	2 ND	FIRST.	Paying Students.
27	Pestaji Naorozi	.....			Joined Second Year Class, as a Free Student.
28	Waman Vinayak	.....			Joined the Class of Surveyors & Builders in the Chief Engineer's Office.
29	Sorabji Framji	.....			Joined Second Year Class, as a Paying Student.
30	Khurshedji Sorabji	.....			Joined Second Year Class, as a Free Student.
31	Sorabji Nasarvanji	.....			Candidate in the Military Board Office.
32	Bhai Jivanji	.....			Joined Second Year Class, as a Free Student.
1	Raghunath Ganpat	.....			Unemployed.
2	Ramerishna Narayan	.....			{ } Joined Fourth Year Class, as Free Scholars.
3	Moroba Sundarji	.....		
4	Bhaskar Balcrishna	.....			{ } Joined Third Year Class, as Paying Students.
5	Antonio L. Fernandes	.....		
6	Jahanghir Jamshedji	.....			{ } Joined Second Year Class, as Free Students.
7	Kaikobad Kavazji	.....		
8	Babaji Kashinath	.....			Joined Second Year Class, as a Free Scholar.
9	Bamanji Bhikaji	.....		
10	Harkisandas Goverdhandas	.....			{ } Joined Second Year Class, as Paying Students.
11	Bezanji Naorozi	.....		
12	Ardeshir Danjibhai	.....			{ } Unemployed.
13	Khurshedji Nasarvanji	.....		
14	Sorabji Palanji	.....			{ } Obtained a West Scholarship.
15	Krishnath Wasudeva	.....		
16	Vienkoba Anandrao	.....			{ } Resigned.
17	Rustamji Naorozi	.....		
18	Bhujangrao Krishna	.....			{ } Obtained a West Scholarship.
19	Tulsing Muto	.....		
20	Narmadashankar Lalshankar	.....			{ } Unemployed.
21	Vinayak Shricrishna	.....		

APPENDIX No. XXIX.

ANNUAL REPORT
OF THE
POONA COLLEGE,
FOR THE YEAR 1854,

ANNUAL REPORT
OF THE
POONA COLLEGE.
FOR THE
YEAR 1854.

Bombay:
PRINTED AT THE
BOMBAY EDUCATION SOCIETY'S PRESS.

1855.

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Establishment,

As on the 1st January 1855.

COLLEGE.

<i>Principal, and Translator. . .</i>	MAJOR T. CANDY.
<i>Professor of English Literature.</i>	WILLIAM DRAPER, Esq.
<i>Professor of Mathematics and Natural Philosophy.</i>	The Rev. J. McDougall.
<i>Assistant Professor of Vernacular Literature.</i>	KRISHNA SHASTRI CHIPLONKAR.
<i>Assistant Professor of Natural Philosophy in the Vernacular.</i>	KERU LAKSHMAN CHHATRE.

TRANSLATION DEPARTMENT.

<i>Translation Exhibitioner. . .</i>	Narsinh Shástrí Ok.
<i>Ditto ditto</i>	Bháu Shástrí Paitkar.

ENGLISH DEPARTMENT.

<i>Assistant Master, in charge of Branch School.</i>	Sakhárám Bálkrishna.
--	----------------------

ASSISTANT TEACHERS.

Atmárám Vináyak.	Pándurang Bálájí.
Aná Sahasrabudhe.	Yadneshwar Dádájí.
Bábá Joshi.	Náráyan Jagannáth.
Wishwanáth Karmarkar.	Govind Jagannáth.
Purshottam Náráyan.	Vináyak Bhide.

SANSKRIT DEPARTMENT.

<i>Professor of Logic (or Nyáya Shástra).</i>	Narsinh Achárya Ok.
<i>Professor of Law (or Dharm Shástra).</i>	Nilkanth Shástrí Bhat.

<i>Professor of Grammar (or Vyākaran).</i>	Dhond Shāstrī Dengwekar.
<i>Professor of Rhetoric and Poetry (or Alankār and Kāvya).</i>	Nārāyan Shāstrī Abhyankar.
<i>Assistant Professor of Law.</i>	Shankar Joshī.
<i>Assistant Professor of Grammar.</i>	Gopāl Achārya.
<i>Sub-Assistant Professor of Rhetoric and Poetry.</i>	Krishna Shāstrī Rājwāde.
<i>2nd ditto ditto</i>	Bāl Shāstrī Deo Tokekar.
<i>Sub-Assistant Professor of Logic.</i>	Gopāl Shāstrī Gokhle.
<i>Sub-Assistant Professor of Grammar.</i>	Mahādeo Shāstrī Garbole.

VERNACULAR DEPARTMENT.

<i>Vernacular Teacher.</i>	Vishnu Pant Tāmhanekar.
<i>Assistant ditto</i>	Vināyak Pant Gokhle.
<i>Kārkun.</i>	Anant Shāstrī Tallekar.
<i>Librarian.</i>	Tātiā Shāstrī Pole.

ANNUAL REPORT

OF THE

P O O N A C O L L E G E ,

FOR THE YEAR 1854.

1.—INTRODUCTORY AND GENERAL REMARKS.

1. I have the honour to submit to the Board of Education my Report of the Poona College for the year 1854.

2. Owing to a change of Professors, to the Classes of Literature having been without a Teacher for a month, and to the departure of a good many of the best students to join the Engineer School established by Lieutenant Colonel Scott, the English Department of the College did not make quite so good an appearance at the Examination in December 1854 as it had done in December 1853 ; yet I trust that, all circumstances being considered, the state of the College will be deemed satisfactory.

3. The numbers at the close of 1853 were :—

In the English department 338

In the Normal department 20

In the Sanscrit department 121

————— 479.

The numbers at the close of 1854 stand :—

^ In the English department	328
In the Normal department	36
In the Sanscrit department.....	124

————— 488

It thus appears that there is a small increase in the sum total of the students.

4. Of these 488 students, 74 are stipendiary, 113 pay a school fee, and 301 are free, on account of poverty. There are 78 stipendiary scholarships, but 4 were vacant at the time of the examination.

5. Though the establishment of the Engineer School by Colonel Scott has somewhat weakened the College for the present, by drawing off so many good students, yet I rejoice at the establishment of that School, and that the College could supply it with so many suitable scholars. Had it not been established, I should have wished for the formation of an Engineer Class in the College.

6. The change of Professors alluded to above (paragraph 2) was caused by the resignation of the chair of English Literature by the Rev. A. G. Fraser, and by the appointment of Mr. W. Draper, of the Elphinstone Institution, to succeed him in it. The resignation of Professor Fraser was a cause of great regret, both to the students and to myself, as I expressed to the Board in submitting his resignation.

7. As Professor Fraser left on the 1st of October, and Professor Draper did not join till the 1st November, the Classes of Literature were without a Teacher for the interval. I regretted this the more, as my own health at that time did not permit me to take charge of the classes myself, as I had done between the departure of Professor Green and the arrival of Professor Fraser. Professor

McDougall, however, was so kind as to take one of the Classes of Literature under instruction while the chair of Literature was unoccupied, for which I felt very much obliged to him.

8. Throughout the year I had three classes under my own instruction in the early morning. From 6 to 7 I had a large class, composed of the Assistant Teachers of the College, several Teachers of Schools in the city, some young men from different offices, and some young Shástrís wishing to prepare for Translation Exhibitions. The class finished Goldsmith's "Citizen of the World," and read some of his Essays. They read also a little brochure on the "Art of Questioning," which I chose on account of the number of Teachers which were in the class. In the Vernacular, on alternate days, the class finished "Bál Mitra," which was rendered into English sentence by sentence, and took up Esop's Fables. From 7 to 8 I had the students of the College division. The attention of this class was chiefly directed to the translation of Maráthí into English. The book read was Esop's Fables. From 8 to 9 I had a class of Normal students advanced in English. This class read with me part of the "Course of Reading," but towards the end of the session we began reading selected pieces in the "Papers for the Schoolmaster." The study of this work will, I hope, be very beneficial to the class. It will give them a right view of the duty of Schoolmasters, and will show them that they must be *educators*, and not mere *teachers*. On one day of every week I had *all* the students of the Normal department.

9. Though my health was very indifferent for a good part of last year, I am thankful to say that the days on which I was unable to teach my classes were very few. At one time, I was afraid that I should be compelled to

leave India before next hot season ; but towards the end of the year my health improved so much that, under the sanction of the highest medical opinion, I resolved to postpone the change. I was very glad to be able to do this, as I was most unwilling to leave with work unfinished.

10. In the session which has just commenced, I have combined my First and Second Classes, that I may have a Class of Candidates for Translation Exhibitions from 7 to 8. This measure makes my First Class inconveniently large (more than 60) ; but I find that translators cannot be prepared except by *special* instruction, and therefore I am compelled to adopt it. My Translators' Class comprises 12.

11. As the College building required considerable repairs, I was under the necessity of closing the College on the 15th April, a fortnight before the vacation. The Executive Engineer applied for the building to be made over to him on the 1st April, but as I could not find another suitable building to be got for rent, I prevailed on him to postpone the work till the 15th.

12. In the past year a valuable set of chemical apparatus, and a collection of geological specimens, have been purchased for the College.

13. Before concluding these general remarks, I would observe, with reference to the permission granted me by the Board, to draw up and submit a form of diploma, in accordance with paragraph 48 of my last Report, that my colleague, Professor Fraser, and I had commenced drawing out one, when the Despatch of the Honorable Court of Directors on Education, which granted a University to this Presidency, caused me to lay it aside as unnecessary, under the prospect presented by the Despatch.

II.—ENGLISH DEPARTMENT.

COLLEGE DIVISION.

14. As Professor Fraser had charge of the Classes of Literature from the beginning of January to the end of September, and Professor Draper from the 1st November to the end of the year, I have received Reports on the classes from both. I subjoin both Reports, and add some remarks on them.

REPORT BY PROFESSOR FRASER.

To Major CANDY,

Principal of the Poona College.

MY DEAR MAJOR CANDY,

15. 1. In compliance with your request, I have the honour to send you a report of the Classes in English Literature during the first seven and a half months of 1854, that I conducted their studies.

I shall begin with the

Freshman Class.

16. 2. In the early part of the session this class consisted of forty-three (43) students. Six of this number soon left the College, to enter public offices as clerks; two left in consequence of protracted illness; and, about the middle of the session, fifteen joined the Engineering School established in Poona under the superintendence of Colonel W. Scott. The class was thus reduced to twenty students.

17. 3. The studies of the class were as follows:—
Literature.—Chambers' Cyclopædia, the 7th Period.

Poets: Bloomfield; Grahame; Crabbe;

Belles-Lettres.—Blair's Lectures, I—XX.

History.—Taylor's Manual of Modern History : as far as the Revival of Learning.

History of Civilization.—Guizot's History of Civilization in Europe : Lectures I—V.

Composition and Elocution.—The class wrote compositions, and delivered selected speeches, previously committed to memory, as exercises in elocution, every Saturday.

18. 4. I had reason to be satisfied with the diligence and progress of a large number of this class. Those whom I considered the most meritorious I shall now name, in the order of their merit :—

- | | | |
|-----------|---|---------------------|
| 1, equal. | { | Rama Ok. |
| | { | Raojee Gudboley. |
| | { | Nana Bhidey. |
| 2, equal. | { | Chintamun. |
| | { | Nowrojee Puddomjee. |
| | { | Babajee Deshpondey. |
| 3, equal. | { | Shaboodin. |
| | { | Venkut Rao. |
| | { | Bala Phudkey. |
| | { | Prubhakur Joglekur. |
| 4, equal. | { | Wassodeo Purajpe. |
| | { | Raojee Poonakur. |
| | { | Rama Gudboley. |

This order has reference to the appearance made by the students in the work of the class, and to the number of marks which they obtained. As some possess a better knowledge of English than others, which gives them a great advantage in the current recitations of the classroom, the order of their names is not an accurate indication of the real merits of all in the list. The first two, however, are in all respects superior to the rest, and are young men of whom the highest expectations may be justly entertained. I need not explain here my system of teach-

ing, as I did so with sufficient fulness in my previous Report. I proceed, therefore, to report on the

Junior Class.

19. 5. In the former part of the session, this class consisted of sixteen (16) students. Two of this number were withdrawn by their parents, in consequence of the fees ; one left to enter a public office ; one was removed by his father for the crime of becoming " civilized " ; one did not return after the May vacation ; and, as he has not since been heard of by his friends, he is supposed to have died of cholera on his journey from his Native village ; one entered the Engineering School referred to in paragraph 2 ; and one left to take up the appointment of College Librarian. The class was thus reduced to nine students. Of this number, moreover, four were appointed Assistant Teachers in the English School department, which prevented their attendance at the class after 1 o'clock P. M.

20. 6. The studies of the class were as follows :—

Literature.—Chambers' Cyclopædia, 7th Period.

Poets : Rogers ; Wordsworth.

History.—Hume's History of England—the British, Roman, Anglo-Saxon, and Norman Periods.

Philosophy of History.—Guizot's History of Representative Government: Lectures III, IV, and V, on the Anglo-Saxon Institutions ; Lectures II, III, IV, and V, on Anglo-Norman Institutions ; and Lectures VI and VII on English charters.

Mental Science : Psychology.—Cousin's Criticism of Locke's Essay ; Introduction ; Chapters I, II, III, and part of Chapter IV, on the Idea of Cause.

Physical Science : Chemistry.—The text-book in Chemis-

try was Wilson's Manual, of which the class went carefully through the introductory chapters on Chemical Philosophy; the whole of the non-metallic elements, with their compounds; and several of the metallic elements, with their compounds. The class also went carefully through "Faraday's Course of Six Lectures on the Non-metallic Elements" (delivered before the Members of the Royal Institution), together with the introductory manipulative details of professor Scoffern.

Practical Chemistry.—All the usual demonstrative experiments, illustrative of the various processes by which the non-metallic elements and their compounds are produced, and of their properties, were performed in the class. The excellent apparatus belonging to the College afforded every facility for this purpose.

Composition and Elocution.—All the members of this class, in rotation, wrote original orations (two members every week), which, after being carefully corrected by the Professor, they committed to memory, and delivered, as exercises in elocution and oratory, on Saturday, in the College Hall.

21. 7. I am able to speak in very high terms of nearly all the members of this class. They seemed to understand the true distinction between the School and the College: that in the former boys depend very much upon their teachers, and that in the latter young men depend very much upon themselves; consequently their reading was by no means confined to the lessons of the class, but was as varied and extensive as their time, and their facilities for obtaining books, admitted of. Their original orations were generally very excellent; evincing considerable proficiency in the various styles of English composition, independent

and just thinking, and a correct idea of public speaking. Purshotum Bhut, Govind Juggonath, Narayan Juggonath, forming one trio, and Dorabjee Puddomjee, Krishna Rahalkur, Venayek Bhidey, forming another trio, students of nearly equal merit, are a great credit to the Poona College, and young men of great promise.

22. 8. My system of instruction in the class was to employ text-books along with familiar teaching—a system which experience has taught me is best suited to the present mental condition of our students, and best adapted to the development of their reflecting powers. I procured for the class, therefore, the very suggestive works of Guizot, Cousin, and Faraday. The object that I kept in view was, not to throw into the reservoir of the memory a mass of positive knowledge, of insulated facts, or detached notions, while the mind itself is left unawakened, unexercised, and unconscious of its strength; but the invigoration of the intellectual powers, the formation of skill in the use of them, the generation of habits of intellectual courage, that can and will grapple with a problem, a proposition, or an argument, conscious of its own strength, and inured to toil.

I proceed now to report on the

Senior Class.

23. 9. This class, consisting of the Assistant Teachers of the English School department, and four members of the Junior Class who did not attend the Mathematical Professor with the rest of their class-mates, contained at the beginning of the session fourteen (14) students. Three left early in the session to take up appointments, reducing the number of the students to eleven.

24. 10. The students of this class, being somewhat

advanced in years, and likely soon to leave the College for public appointments, were allowed to exercise their choice in regard to the subjects of study. Their selection embraced the following studies —

Political Philosophy and Jurisprudence.—The article on Jurisprudence in the “Standard Library Cyclopædia of Political Knowledge”; “Elements of Jurisprudence,” by Professor Foster, of University College, London, I, II, III, and part of IV Lectures; the “Principles of Criminal Law,” published by Pickering; Montesquieu’s “Spirit of Laws,” Book I, of Laws in General, Book II, of the Laws directly derived from the Nature of Government; Guizot’s “History of Representative Government,” Lectures VI, VII, and VIII, on the Classification of Governments, the Comparison of the Principles of different Governments, and the Forms essential to Representative Government; Mill’s “Principles of Political Economy,” Book V, Chap. I, of the Functions of Government in General, Chap. XI, of Grounds and Limits of the Non-interference Principle; “Cabinet Lawyer,” Part I, Government and Laws of England, Chaps. I—VI inclusive; Broom’s “Selection of Legal Maxims,” Chaps. I, II, III, IV, and V; “The Regulations of the Government of Bombay,” Regulations I—IV inclusive.

Physical Science.—“Elements of Agricultural Chemistry and Geology,” by Professor Johnston, Chaps. I, II, and III; Stephen’s “Book of the Farm,” Chap. V, on the branches of Science most applicable to Agriculture.

Elocution and Oratory.—The members of this class wrote essays, in rotation, weekly; two were appointed weekly to conduct an extemporaneous debate on a prescribed

question; and, in the latter part of the session, two were appointed weekly to give, extemporaneously, a summary of several chapters of some one of the text-books.

25. 11. Several members of this class made the most satisfactory proficiency in their various studies. In extemporaneous speaking and debate the most manifest improvement was made by the members of the class generally. I must, however, make special mention of Narsinh Shástrí Ok, Bhao Shástrí Paikur, Bala Moné, Atmaram, and Nana Bhidey, as young men of superior attainments, and of sterling worth. I am persuaded that they will quit themselves, in any public situation in which they may hereafter be placed, in such a manner as to reflect the highest honour on the College. In a knowledge of the general principles of Jurisprudence, of the Regulations of the Bombay Government, and of the practice in the Honorable Company's Judicial Courts, Nana Bhidey has made the greatest and the most creditable attainments.

26. 12. In conclusion, allow me to say, that I feel the liveliest interest in the Poona College. I know the worth of many of the students, and I shall labour as cordially to promote their future prosperity and usefulness as if I were still connected with the College. I did not sever my official connection with them without much hesitation, nor without serious deliberation; and I would never have done so, except to enter another sphere of labour among the Native youth of India, which, at the time, appeared to me to offer facilities for more extensive usefulness. I trust you will allow me, my dear Major Candy, to take this opportunity of acknowledging the delightful obligations under which you have placed me, by all the encouragement and kindness that I received from you while I was

connected with the College. I shall ever cherish sentiments of gratitude for your kindness, and of the highest esteem for yourself. I beg you will allow me, also, to record my opinion of the Poona College. You have raised it to a very high eminence as a seminary of sound and practical education. I believe that there is no educational institution in this Presidency which is exerting so powerful and extensive an influence for good on the community as the Poona College. Moreover, in its fund it possesses the means, and in the class of students who frequent it the materials, of becoming, what I know you wish to see it, a first-rate collegiate institution, standing up in the midst of the Deccan as an intellectual bulwark against every influence hostile to true progress.

Believe me,

My dear Major Candy,

Yours very faithfully,

ALEX. GARDEN FRASER.

Bombay, 20th January 1855.

PROFESSOR DRAPER'S REPORT.

27. I took charge of the Classes of Literature on the 1st November, and as there was but a month between this and the commencement of the Examinations, I employed the time in letting the students revise as much as they were able of what they had studied during the previous part of the year. The lists of the studies of the several classes, as given below, were furnished by the students themselves, and the statements made by them were my only guide in the examinations.

Senior Class.

28. The studies of this class during the past year were—

Company's Regulations, I—IV.

Elements of Jurisprudence.

Chemistry.

29. This class contains eight students, seven of whom were present at the examination. In the four Regulations, the whole of which they had revised with me in November, the greater part of the class passed a very satisfactory examination.

30. In Jurisprudence they informed me that they had read three of Foster's Lectures. They, however, possessed no books of their own, but had used two copies kindly lent to them by my predecessor. These he had taken away with him. The class expressed themselves very anxious to revise what they had studied of this subject, and every effort was made to procure a copy of the work, but it was found impossible to obtain one either in Poona or Bombay; and at the time of the examination the students stated, that not having revised the subject, they felt unable to undergo an examination. It was therefore considered unnecessary to prepare any questions for them, the more especially as none of them had taken notes, or were able to state what part of Jurisprudence they had studied.

31. A paper in Chemistry was given to this class conjointly with the Junior Class, by the Professor of Mathematics.

32. As a test of their general knowledge, and their skill in composition, all the classes were required to write essays. This class had the choice of the following subjects :—" The Advantages of cultivating a Cheerful Disposition"; and "The Influence of the invention of Printing on the Diffusion of Knowledge." They chose the latter. Their essays were not at all satisfactory. The

ideas were poor, and the composition faulty. That written by Atmaram Venayek, though not entirely original, is the best expressed ; and I forward it and the next best as specimens.

33. This class has made but a poor appearance for a senior College class. I should, however, have been much surprised if it had done otherwise. The class consists entirely of Assistant Masters, and most of them, in addition to teaching their several classes, have themselves been under tuition four hours daily—one hour with the Professor of Literature, one hour with the Professor of Mathematics, and two hours in the early morning. They consequently have had scarcely any time for study. Teaching is a valuable auxiliary in the acquisition of knowledge, and a good Teacher will be able greatly to facilitate the progress of his pupils ; but teaching, though a very important auxiliary, is only an auxiliary ; and it is a mistake to suppose that mere attendance on College classes is all-sufficient. The capacities of students vary, and some subjects require more study than others ; but there should, I think, be on an average at least two hours' private study for every hour's attendance at College. I am the more earnest in dwelling upon this, because I am sorry to find that want of application is not peculiar to the Senior Class. The other classes, though without their excuse, have followed their example. The majority of the students seem to have been quite satisfied with *being taught*, and the indefatigable exertions and valuable instructions of my accomplished predecessor have consequently not been so beneficial as they otherwise would have been.

34. Another great obstacle to progress is the general scarcity of books. The Senior Class, consisting of eight

students, have been accustomed to consider two copies of a text-book an ample supply, and in the Freshman Class, containing twenty students, there were only six or seven copies of some of the ordinary class-books. I think it very desirable that the Assistant Masters should be permitted to attend the Classes of Literature for at least another year; but in this case I hope that time will be allowed them for study, and that they will supply themselves with books. It is not necessary that students should possess all the works from which the Professor may give notes, but each student should be provided with a complete set of the principal text-books. I trust that this will be made compulsory on all the students, and I hope I shall be able to inculcate habits of study.

Junior Class.

35. The studies of this class were—

Literature.—Chambers' Cyclopædia, the 7th Period :
Rogers and Wordsworth.

History.—Hume's History of England: The Norman Period to the end of the reign of John.

Psychology.—Cousin's Criticism of Locke's Essay : Introduction, and Chapters I—III.

Chemistry.

Composition.—Original Essays.

36. The number of students in this class at the time of the examination was five, one of whom, Vishnu Kelkar, I had not seen previously, as he had been for a long time absent. The other four had revised with me part of their History, and the whole of their Psychology. In addition to the regular students, four of the School Teachers had attended the class for Literature, and were examined with them in that subject.

37. The examination in Literature was conducted before the College Council in the following manner. The class were required to read aloud some of the selections from Rogers, and were afterwards questioned as to the meaning and grammatical structure of what they had read. The pieces were read in a creditable style, and the meanings were generally given pretty well, but the knowledge of grammar fell far short of what I should have expected from a class of this standing. In some instances they were unable to name the cases of nouns, and the moods and tenses of verbs.

38. In History, two of the class acquitted themselves very creditably, and the same two passed a satisfactory examination in Psychology. Dorabjee Puddomjee, who comes out at the head of his class, deserves to be mentioned as an industrious student.

39. Some of the essays of this class were better than those of the Senior Class, the best being that of Purshotum Bhut. Narayan Juggonath's is little inferior in composition, but the ideas are not so good. I forward both of them as specimens.

Freshman Class.

40. The studies of this class were as follows :—

Literature.—Chambers' Cyclopædia, the 7th Period :
Bloomfield, Grahame, and Crabbe.

History, and History of Civilization.—Taylor's Manual of Modern History, 102 pages ; Guizot's History of Civilization in Europe, Lectures I—V.

Belles Lettres.—Blair's Lectures, I—XX.

Composition.—Original Essays.

41. In this class there were twenty students on the roll, fifteen of whom were present at the examination. The

class had revised with me the five of Guizot's Lectures, and a portion of Taylor's Manual, and Blair's Lectures..

42. The examination in Literature was conducted in the same manner as in the Junior Class, and the result was rather more unsatisfactory. Many of the class were unable to explain the meaning of what they read, and failed to answer very simple questions in parsing.

43. In History the examination was also unsatisfactory. The oral answers, however, were better than the written answers. All the students were very much afraid of being examined in any part of their studies that they had not recently revised, and in the *vivâ voce* examinations I generally confined myself to what had been revised in class during the previous month. In Blair's Lectures the answering was very creditable.

44. This class, like the two preceding, was allowed the choice of two subjects for an essay. They chose "Benevolence." Very few of the class seemed to have a correct idea of the signification of the word ; but their essays were somewhat better in composition than in matter. The best essay was Nowrojee Puddomji's, but Raojee Gudbole is decidedly the best man in the class. His marks would have come higher than they are, but for an unfortunate habit of misspelling. There were no fewer than seventeen mistakes in spelling in his essay.

45. The unsatisfactory state of the College classes is no doubt owing, in a great measure, as mentioned above, to the disposition of the students to rely wholly upon the Professor. They seem to have regarded themselves as recipients of instruction rather than as students, and to have considered their work over when the College closed. But in addition to this general want of application, and the scarcity of books, there is yet another and more formidable

obstacle to progress, the very imperfect knowledge of English with which students enter the College; and till some improvement in this respect is effected, I do not see how any great proficiency can be attained, either in the subjects taught by the Professor of Literature, or in Mathematics. English is the sole medium of instruction in the College: it is the language of the Professors, and the language in which all the books are written; and unless a competent knowledge of English be insisted on as an indispensable qualification for admission into the College, all attempts at high education must prove futile. The present Freshman Class, at the end of their first year, have not that knowledge of English which they ought to have possessed before entering the College; but, at the same time, it is only just to state that they are at least two years in advance of the Candidate or Senior Class of the School department. This latter class was examined in English before the College Council, and I was much surprised at the appearance it made. In reading, they were not only very imperfectly acquainted with the meaning of what they read, but many of them experienced great difficulty in pronouncing the words; and there was of course no attempt at elocution. Scarcely one of them was able to express himself in correct English in answer to a simple question, and some of their answers were hardly intelligible. A subject was given them for a short essay; and their compositions, which I examined, were expressed in the same broken-English style in which they speak. Not one of the class is, in my opinion, fit to enter the College; and they could not be properly qualified in another year.

46. The importance of maintaining an English College in the heart of the Mahratta country,—a College in which those hitherto accustomed to study only the Vedas and

the Shasters may be made acquainted with the Literature, the Science, and the Civilization of Europe,—can scarcely be over-estimated. But without a preparatory School, capable of supplying the College with students able to read and understand English, much of the time of the Professors will be occupied in teaching *the language* alone, and the course of studies must of necessity be very limited. Two years ago, I believe, it was found that none of the pupils of the Candidate Class were qualified to enter the College. The class was consequently kept in the School another year, being placed during that period under the tuition of the Professors of the College. This year, recourse must be had to the same expedient, or students must be admitted into the College without having acquired the means of understanding the language of the books placed in their hands. It thus appears, that the School in its present state is incapable of furnishing students for the College: I would therefore respectfully suggest, that measures be taken to secure for the School an efficient staff of Teachers, and that with this view the Board of Education be requested to sanction a higher rate of remuneration. The salary of the Master of the Candidate Class is at present only Rs. 25 per mensem, and some of the Teachers receive only Rs. 10. The salaries of the Assistant Masters at the Elphinstone Institution are three or four times these sums; hence efficient Teachers are secured, and consequently the Elphinstone College possesses an immense advantage over the Poona College—an advantage which the most strenuous exertions of the Professors will never be able to counterbalance. It will afford me great pleasure to give instruction to any of the present Teachers, and if an increase of pay were held out as an inducement, probably several of them would make

themselves masters of the requisite amount of knowledge. In the mean time, the introduction of two or three efficient Teachers from without would, I think, be very desirable. While, however, the pay of the Assistant Masters is less than can be obtained in Government offices as copying clerks, there is little chance of procuring, and no hope of retaining the services of well qualified men. Several young men, formerly belonging to the College or the English School, are now employed in offices in Poona, at salaries ranging, I believe, from Rs. 40 to Rs. 100 per mensem.

47. I beg to forward copies of the paper questions, with specimens of the answering. I also annex tables, showing the number of marks obtained by each student.

WILLIAM DRAPER,
Professor of English Literature.

22nd January 1855.

48. The Reports given above are so different in character and tone, that I fear the Board will feel it difficult at first to believe that they respect the same classes ; but I accept both as containing truth, and as presenting the views taken by their respective writers.

49. By taking both, and combining them, a correct view of the College is obtained. Mr. Fraser wrote of young men whom he had known for two years, whom he had attached to himself, and for whom he felt a great regard. Their good points are uppermost in his mind, and his report of them is consequently chiefly laudatory. I can confirm what he says to a great degree ; for almost every student whom he has named as possessing merit, and being worthy of commendation, stands high in my opinion. I quite concur with him in the sentiment which

he has expressed, that some of the students are young men of whom high expectations may be justly entertained ; and of others I am, with him, persuaded that they will quit themselves, in any public situation in which they may hereafter be placed, in such a manner as to reflect honour on the College. And of the institution itself generally, I am convinced, that though at present it is far from what I hope it will eventually become, *it is* exercising a decided influence on the country, and furthering the cause of progress.

50. Mr. Draper, on the other hand, has reported on young men amongst who he had only recently come, and whose defects and blemishes struck him more than their good points. It may be, too, that he has a quicker eye for the former than for the latter. I quite admit (in some points *fully*, and in others with qualification) the existence of the blemishes he has pointed out. The English Composition of many of the students is decidedly inferior, and many failed to make a good appearance in Grammar. The former defect has existed all along, and has been repeatedly acknowledged to the Board ; but it is less than it was, and will, I hope, continue to decrease. The latter defect surprised me much at the examination, the more so as some of those who failed in Grammar were amongst the most intelligent, and were at the top of the class in other respects. This point shall receive particular attention ; and I trust that the next examination will show a good knowledge of Grammar.

51. With respect to the imperfect English of the students, on which Mr. Draper dwells, I would point out that more fluency in speaking English, and greater power of expressing ideas in it, should be looked for in Bombay, where the number of Europeans is so great, and where

Natives come so much in contact with them, than in Poona, where Europeans are few, and where Natives have few opportunities of intercourse with them. But students of English in Poona should possess as critical a knowledge of English as students in Bombay; and probably the students of the College will bear comparison *in this point* with Bombay students *of the same standing*.

52. Of the Senior Class of Literature Mr. Draper observes: "This class has made but a poor appearance for a senior College class"; but he adds immediately—"I should have been much surprised if it had done otherwise," and gives the reason, viz. that it was composed of Assistant Teachers, who had to give their chief attention to teaching, and who were themselves four hours under tuition. It seems clear, therefore, that this class should be considered as *a Class of Assistant Teachers, studying for their own improvement*, rather than as an ordinary College class; and their circumstances being considered, their appearance may not be deemed poor.

53. I earnestly requested Mr. Fraser to send me his Report on the Literature Classes before the examination of the College commenced, that it might serve as a guide in examining the class, but I did not receive it till long after the examination had closed. Had it reached me in time, the examination would have been more easy, and the discrepancy between the two Reports would in some respects have been less.

54. Of the books enumerated by Mr. Fraser (see paragraph 24) as the text-books of the Senior class, the greater part were brought by him to the class, and referred to as occasion required.

55. With regard to the Candidate Class; *i. e.* the highest class of the School division, of which Mr. Draper speaks so

disparagingly, I beg to point out that the greater part of the students composing it have got up to the top of the School division in about three years and a half, and therefore, though they may not be thought qualified to enter the College division, they should not be reported as having acquitted themselves very badly. I quite concur, however, with Mr. Draper in opinion, that they *are not* sufficiently advanced to be admitted now into the College division. They will accordingly remain in the School division during this year, coming an hour each day under each Professor ; and I confidently expect that at the next examination they will be found fit for promotion. The students of this class are for the most part very intelligent and promising. At the beginning of the year the class had a very good Teacher, but he was promoted to the Mastership of the English School at Dharwar, and left the College. He was succeeded by an equally good Teacher, but he resigned, to qualify himself for a more lucrative situation. The third Assistant Teacher then became the first, and took the class ; but though very intelligent, willing, and well conducted, he lacks tact in teaching. I purpose giving him* the Second Class, and putting this class under the Teacher of the Second, who has more acquaintance with English.

56. I do not at all concur with Mr. Draper in the disparaging view he gives of the Assistant Teachers of the School division, nor in his statement that the School in its present state is incapable of furnishing students for the College. The Assistant Teachers are not all *equally good*, but of the greater part of them I can say that I do not wish to change them for any that any Institution could supply.

* He has resigned, and has obtained a situation in an office.

They are very intelligent, and the majority are *quite efficient as Teachers of School classes*. All that is wanted is, that the students should be kept *longer in the School*. Their passage through it has hitherto been too rapid. For the Candidate Class, indeed, I should like to have a superior Teacher, but the salary of the Teachership is not sufficient to draw a highly qualified man, or to retain one raised and trained in the College. In my Report for 1851-52 (my first report after the amalgamation), I pointed out to the Board the insufficient salaries of the Assistant Teachers, and expressed my opinion, "that the lowest should not be lower than Rs. 10, and that they should rise as high as Rs. 50 a month." They have been increased since then as funds became available, but they are yet far below what I wish them to be.

57. Mr. Draper points out the insufficient number of books in the College classes. It is an evil of which I admit the existence, but for which I do not see an easy remedy. The books are for the most part dear, and the students are, generally speaking, poor, with stipends of Rs. 5 or Rs. 6, barely sufficient to support them. If I were to require that every student should provide himself with a copy of every class-book, it would be felt to be a great hardship. I desire, however, to see the evil remedied as much as can be, and press on the students the importance of providing themselves with books.

58. On one point the opinions of Messrs. Fraser and Draper respecting the students are quite opposed to each other. Mr. Fraser says that nearly all seem to understand the true distinction between the School and the College, and act accordingly (see paragraph 21); while Mr. Draper represents them to be mere school-boys (see paragraphs 33, 45). There are students which answer to both

descriptions. *All*, I regret to say, are not students in the distinctive use of the word ; nor are all, I am happy to state, glad to drop all thoughts of study when the class breaks up.

59. In concluding these remarks on the above Reports, in which I have endeavoured to present to the Board an exact view of the state of the Institution, I respectfully beg to observe, that in judging of the Poona College, it should be borne in mind, that though English occupies the greater part of the time of the majority of the students, both the Vernacular and Sanscrit have considerable time devoted to them.

60. While I regret the depreciating tone of Mr. Draper's Report, and especially that, without first inquiring how long the students of the Candidate Class had been in the School, he should have spoken of them in terms of so much disparagement, I beg to say, that it will give me great pleasure to see him labour earnestly, perseveringly, and judiciously, to raise the character of the Literature Classes of the College. All such efforts shall receive my cordial support and co-operation.

61. I subjoin now the Report of the Professor of Mathematics and Natural Philosophy, on his Classes in the past year. The Board will see that it is satisfactory. The students that left the College in the middle of the last session continued to attend their Mathematical Classes under Mr. McDougall till the end of it, and were present at the examination. This will account for the superior appearance made by the Mathematical Classes over the Classes of Literature. The Professor of Mathematics in the College is also the Head of the Engineer School.

REPORT ON THE CLASSES OF MATHEMATICS AND NATURAL PHILOSOPHY.

To Major CANDY,
Principal, Poona College.

SIR,

62. I have much pleasure in again submitting to you my annual report on the progress and studies of the students in the Mathematical and Natural Philosophy departments of the Poona College.

63. I mentioned in my last, that arrangements had been made, by which I could have the Assistant Teachers one hour a day under my immediate superintendence. I also stated the object which I had in view for wishing such arrangements to be brought about. I am glad to say, that I have in a large measure been successful. I hope I have taught the Assistant Teachers, that neither in Arithmetic nor Algebra are rules everything; that there is little if any satisfaction in imparting instruction in any of the above-mentioned subjects merely by a system of routine. I believe I have established the principles of the sciences referred to in the minds of the Teachers, both by reason and demonstration, and thus have taught them the proper position which rules ought to occupy.

64. We began with the principles of arithmetical notation, and gradually advanced in our investigations until we had completed a course of theoretical arithmetic. We then began our algebraical investigations, and brought them also, I hope, to a satisfactory termination. De-Morgan's Arithmetic and Algebra were our text-books.

65. Having some time remaining before the annual examinations came on, I thought it desirable to give the class an abridged course of Popular Physics, instead of a

course of Pure Mathematics, as I at one time intended. My reason for doing so was to enable the Teachers to explain with more correctness to their respective classes the allusions made in the various class-books to the different departments of science. The class evinced considerable interest in my illustrations of the mechanical powers. I dwelt for some time, also, upon the equilibrium of fluids—for example, on specific gravity, the siphon, the weight of air, and of course on the barometer, the air-pump, and the thermometer. I hope that in this department also the class has reaped considerable benefit.

JUNIOR CLASS.—1st Year's Students.

66. At the time that this class was admitted into the College, the students in it had, although a very correct, but a limited knowledge of Algebra. I therefore considered it my duty to give the class as extensive a knowledge of this most useful branch of science as our time would allow. I first turned the attention of the class to the investigation of the binomial theorem, with its applications to the development of series. We then considered very fully the exponential theorem, the theory of logarithms, summation of infinite series, &c.

67. The subject which next in order claimed our attention was Trigonometry, synthetically considered, with its application to the measurement of heights and distances; after which followed, in regular gradation, Analytical Trigonometry. While upon this branch of the course, the students investigated a great variety of new and interesting formulæ—spherical geometry, analytical spherical trigonometry, and conic sections. It may appear at first sight, that I might have undertaken one or two additional subjects with the class. Under ordinary

circumstances I certainly would have done so, but the class was so numerous (29), that I found it impossible to do anything like justice to the students in the way of examination, had I attempted to hurry more rapidly over the ground.

68. I have to express my entire satisfaction with the progress which the class as a whole has made. A few, it is true, do still lag behind, principally, however, from the difficulty which they have in giving expression to their ideas in English ; but there are many very promising young men in the class. In fact, I can with confidence say, that eight or ten of the students whose progress I am reporting are among the finest analysts that I have anywhere met with.

SENIOR CLASS.—*2nd Year's Students.*

69. The progress of this class has been steady and uniform. At the commencement of last session, there were some branches of pure Mathematics still remaining to be considered, viz. the differential calculus to be completed, and the integral calculus to be commenced and completed. Both objects having been fully obtained, I commenced the class with the study of Natural Philosophy. A great portion of Young's Mechanics was carefully gone over. I did not, however, confine the attention of the class to our usual text-book. During the course of the session we frequently consulted Earnshaw's Statics, particularly the very interesting chapter on the theory of couples, and Jackson's Theoretical Mechanics. In Dynamics, when considering the doctrine of centripetal forces, frequent reference was made to the second section of Newton's Principia. The remaining portion of the session was profitably spent by the class having their attention turned

towards the science of Optics. The subjects of this branch of natural philosophy not being nearly exhausted at the termination of the session, they have been again resumed.

70. I have had much satisfaction with the progress and uniform good conduct of the students belonging to this class. In my last report, I mentioned that the then Senior Class were very poor, and therefore anxiously seeking for employment. We had not advanced far with our course when all of them, except one, obtained situations. The class, therefore, was broken. I, in consequence, had more time to bestow upon the Assistant Teachers.

71. I may mention here, that the students of my Senior Class, along with other two young men, had their attention directed towards Elementary Chemistry by Professor Fraser. At the request of the Principal, I drew up an examination paper for the class. The state of the marking will show the proficiency of each student in the class.

72. In conclusion, I beg leave to send specimens of answering in my Mathematical and Natural Philosophy Classes, and the state of the marking in all the classes over which I had control.

JAMES McDUGALL,

Professor of Mathematics and Natural Philosophy.

Poona College, 16th January 1855.

73. The specimens of answering of the College Classes, and the lists showing the state of the marking, will be found in the Appendix.

RESULTS OF THE EXAMINATION.

SCHOOL DIVISION.

74. The following is a statement of the results of the examination of the School division in December :—

the whole; Prefixes and Affixes; Latin and Greek Roots, from the Series of Lessons; Parsing; Chambers' Geography, 10 pages; Writing from Dictation.

Remarks.—This class has some good readers, and some very bad ones. In grammar they did pretty well, and also in the roots. The writing from dictation of most was very correct.

81.

Class V.

Teacher, PANDURANG BALAJI.

No. on the roll.....	32
Present	25
Sick	4
Absent	3
	— 32

Studies.—The Series of Lessons, pages 135; Chambers' History of the British Empire, to the reign of Richard II.; Reid's Geography of the first Three Quarters; Latin and Greek Roots, in the Appendix to the Series of Lessons; Writing from Dictation.

Remarks.—This class, on the whole, reads well. The parsing is good; knowledge of roots fair; writing from dictation fair; geography middling. The state of the class is creditable to the Teacher, who has evidently taken pains.

82.

Class IV.

Teacher, GOVIND JAGANNATH.

No. on the roll	21
Present	20
Sick	1
	— 21

Studies.—The Series of Lessons, 170 pages; Chambers' British Empire, as far as the reign of Richard III.; Reid's Geography; Introduction, and General Geography of Three Quarters, Asia, Europe, and Africa; Latin and Greek Roots, from the Series of Lessons, together with Prefixes and Affixes from the same; Writing from Dictation.

Remarks.—The reading of this class is good; their knowledge of history (as far as they have gone) is good; knowledge of roots good; geography fair; writing from dictation good. The state of the class is creditable to the Teacher.

83.

Class III.

Teacher, VINAYAK BHIDE.

No. on the roll.....	40
Present	37
Sick.	1
Absent	2
	— 40

Studies.—The Course of Reading, 4 sections; Latin and Greek Roots, from the same; Chambers' British Empire, 60 pages; Reid's Geography, Four Quarters of the World; McCulloch's Grammar, as far as Etymology; Affixes and Prefixes from the same; Writing from Dictation.

Remarks.—In reading the class is unequal. It has some very good readers, and several poor ones. The knowledge of history displayed is very good; knowledge of roots very fair; grammar very fair; writing from dictation good. Altogether the state of the class is creditable to the Teacher.

84.

Class II.

Teacher, ANNA SAHASRABUDHE.

No. on the roll	21
Present	21

Studies.—The Course of Reading, the whole; Murray's History of British India, 5 chapters; Chambers' Biography, 42 pages; McCulloch's Grammar (Syntax finished); Reid's Geography of the Four Quarters, and of Hindustan; Latin and Greek Roots; Writing from Dictation.

Remarks.—This class did not make quite so good an appearance as it should have done. The reading is generally inferior; knowledge of history inferior; geography fair; grammar fair; writing from dictation very good of most. Correction of wrong sentences good.

85.

Class I. or Candidate Class.

Teacher, ATMARAM PATKAR.

No. on the roll.....	29
Present	27
On leave	1
In mourning.....	1
	— 29

Studies.—The Course of Reading ; Poetical Reader, No. IV, pages 25 ; Murray's India, 7 chapters, from the VI to the XII ; Reid's Rudiments of English Composition, pages 55 ; Connon's English Grammar, pages 39 ; Reid's Physical Geography, pages 14. The scholars write short Essays.

Remarks.—The reading of this class is inferior ; knowledge of meaning only middling ; knowledge of history fair ; grammar fair ; writing from dictation fair. The class is not considered sufficiently advanced to be admitted into the College division. The Teacher is intelligent and willing, but it is evident that he lacks tact in teaching.

ARITHMETICAL CLASSES.

86.

8th Class.

Teacher, ANNA SAHASRABUDHE.

No. in class	16
Present	14
Sick	1
Absent	1
	— 16

Studies.—Compound Division.

Remarks.—Examples very readily solved. This class well grounded, and very well taught.

87.

7th Class.

Teacher, GOVIND JAGANNATH.

No. in class	16
Present	14
Absent	2
	— 16

Studies.—From Joyce's Arithmetic : Numeration, Addition, Subtraction, Multiplication, Division, Reduction, Compound Addition, Compound Subtraction, Compound Multiplication, and Compound Division ; Rule of Three, direct and inverse ; Double Rule of Three ; Fractions as far as Division.

Remarks.—This class on the whole very equal. Two or three at the bottom might be more profitably employed in the next lower class. The Teacher evidently has bestowed much attention on his class.

88.

6th Class.

Teacher, NARAYAN JAGANNATH.

No. in class	27
Present	22
Sick	3
Absent	2
	— 27

Studies.—From Joyce's Arithmetic: the Rule of Three; the Double Rule of Three; Vulgar Fractions; Decimal Fractions; Involution.

Remarks.—This class contains a number of intelligent boys, who do their work very cleverly. The Teacher deserves credit for the evident pains which he has taken with his pupils.

89.

5th Class.

Teacher, YADNESHWAR DADAJI.

No. in class	20
Present	17
Mourning	1
Sick	1
Absent	1
	— 20

Studies.—From Joyce's Arithmetic: Vulgar Fractions, the whole; Decimal Fractions, the whole; Evolution; Profit and Loss; Partnership without Time, and Partnership with Time; Simple Interest; Compound Interest. From Young's Algebra: Simple Addition, Subtraction; Multiplication; and Division.

Remarks.—This class unequal. Some intelligent men at the top. The class on the whole made a respectable appearance. Teacher diligent.

90.

4th Class.

Teacher, ATMARAM PATKAR.

No. in class	13
Present	12
Sick	1
	— 13

Studies.—Arithmetic: Practice; Tare and Tret; Partnership; Simple Interest; Discount; Equation of Payments; Compound Interest; Profit and Loss; Vulgar Fractions—Reduction,

Addition, Subtraction, Multiplication, Division, and Proportion of Fractions ; Decimal Fractions—Addition, Subtraction, Multiplication, Division, and Proportion of Decimals ; Extraction of the Square and Cube Roots ; Duodecimal, or Cross Multiplication ; Mensuration and Miscellaneous Questions ; Algebra—Addition, Subtraction, Multiplication, and Division ; Algebraic Fractions—Addition, Subtraction, Multiplication, and Division ; Involution and Evolution ; Simple Equations of one, two, and three unknown quantities, with extra examples from Chambers.

Remarks.—This is a much better class than appears at first sight ; their knowledge is much greater than they can express. Their great deficiency in English is much against them.

91.

3rd Class.

Teacher, VINAYAK BHIDE.

No. in class	15
Present	13
Mourning	1
Absent	1
	— 15

Studies.—Chambers' Algebra : Simple Equations containing one, two, and three unknown quantities, and questions producing Simple Equations involving one and two unknown quantities.

Remarks.—This class is in capital order ; they therefore do their work both quietly and well. The Teacher, although not of long standing, seems to understand his business. He possesses both energy and firmness.

92.

2nd Class.

Teacher, PURSHOTAM BHAT.

No. in class	20
Present	18
Sick	2
	— 20

Studies.—Young's Algebra, as far as Simple Equations of three unknown quantities ; Euclid's Geometry, the whole of the six books.

Remarks.—A good many very promising young men in this class. Their great want of English prevents them from giving

expression to anything like the knowledge of geometry and algebra which they are really possessed of.

93. *1st, or Candidate Class.*

Teacher, PANDURANG BALAJEE.

No. in class	21
Present	18
Sick	2
Absent	1
	— 21

Studies.—Algebra, as far as Quadratic Equations ; Geometry, the first six books of Euclid.

Remarks.—This class contains a good many really clever young men. The class, as a whole, is considerably above an average. The failure of any one was more owing to an imperfect knowledge of English, than to any want of mathematical knowledge. The Teacher has evidently discharged his duty very faithfully.

III.—VERNACULAR DEPARTMENT.

94. I am happy to say that this department is in a satisfactory state. The Normal students have proved good Teachers under the superintendence of Assistant Professors Krishna Shástrí and Keru Lakshman, and of Vishnu Punt, the Master of the Vernacular department.

95. Krishna Shástrí Chiplonkar has been confirmed in his appointment of Assistant Professor of Vernacular Literature since my last Report.

96. The book of “ Extracts from Maráthí Poets,” which was in the press at the date of my last Report, has left it, and is now in use.

97. I subjoin entire the Reports on this department made to me by Assistant Professors Krishna Shástrí and Keru Lakshman. As they are full, they preclude the necessity of further observations here from me :—

REPORT ON THE VERNACULAR DEPARTMENT, BY ASSISTANT PROFESSOR KRISHNA SHASTRI.

98. This department, as was stated in my last report, consists of several divisions ; the first division consists of the Translation classes, the second of purely Vernacular classes, composed of boys from the English department ; the third consists, again, of Vernacular classes composed of students from the Sanscrit department ; and the fourth and the fifth comprise the Arithmetical and Mathematical classes of junior students, from the English department, and the students of the Sanscrit department.

99. The principles which have been adopted in arranging these classes in different divisions, and the subjects of study in the same, to increase and keep up efficiency of instruction in the Vernacular, and at the same time to avoid an injurious multiplicity of studies, have been already explained in my last report. One or two things of importance, however, introduced into this department during the session, deserve particular mention in this report.

100. We have six classes in the Translation division, and nine in the Vernacular division, to be instructed, while there are only three Teachers for the Translation classes, and five for the Vernacular ones, two Translation Exhibitions having been vacant during almost the whole of the session. To supply this deficiency, it was thought proper to send regularly some of the senior students from the Normal department to teach the lower classes in those divisions. Beside this consideration of convenience, there was another, that has led to the adoption of this arrangement. The Normal students, in addition to the instruction they receive in different branches, require some practice and experience in the art of teaching, to make them efficient School-

masters ; and it is with the view of affording them the opportunity of acquiring those essential requisites in a competent teacher, that they are required to give one or two hours to regular teaching. The result of the experiment is satisfactory. The classes taught by the Normal students have acquitted themselves, as will appear from the sequel, to the satisfaction of the examiners, and to the credit of themselves and their Teachers.

101. The Translation classes, as has been stated above, are six in number. The first class, which is the same with the Freshmen Class in the College division of the English department, is under my own tuition, while the second and the third are taught by the Exhibitioners, and the remaining three by Normal men. I have read with my class the whole of Clift's Political Economy, from the sixth chapter, and revised the first five ones. I did not confine myself to teaching the translation of the book, but tried to explain to the students the principles of the science at some length. The pupils could not give that degree of attention and amount of time which are required for the thorough comprehension of the subject, on account of the various studies which they are required to attend to. They made, however, a good figure at the examination. The classes under the tuition of the Translation Exhibitioners did not, perhaps, come off so well as may be expected from them ; but this somewhat unfavourable result is to be attributed to the circumstance that the book read in those classes was rather difficult of translation, on account of its complicated style. The book was chosen only because it was read as a class-book by the boys in their respective classes in English. The classes taught by the Normal men did very well on the whole.

102. In the purely Vernacular division there are nine

classes. They are taught by the two Translation Exhibitioners, the Vernacular Master, the Assistant Master, and some senior Normal men. I have not taught any Vernacular class during the last session. During the time those classes are assembled, I take a Sanscrit class, composed of some of the Assistant Teachers, and some young men who attend the College only one or two hours in the morning. Into the Vernacular division we have introduced five new works, namely, the Life of Cyrus, the Life of Socrates, the Life of Captain Cook, Popular Stories of Elephants, and Alankár Wiwék.

103. It is due here to give our sincere thanks to the Dakshinā Prize Committee for the present of upwards of one hundred copies altogether of different works published under its auspices. These copies are lent to poor students, who cannot buy any for their own use on account of their poverty. We expect some two or three very valuable works from that Committee in the course of a year or so.

104. The progress of the different classes, and the state of the department itself in general, I hope, will be found satisfactory, and of an encouraging nature, from the detailed statement of the result of the last examination given in the sequel.

KRISHNA SHASTRI CHIPLONKAR,
Assistant Professor of Vernacular Literature.

REPORT OF THE STUDIES AND PROGRESS OF THE VERNACULAR MATHEMATICAL DEPARTMENT OF THE POONA COLLEGE, IN 1854.

105. The classes under my superintendence during the last year were nearly the same as those of the preceding year, viz :—

I. Four classes, Arithmetical and Mathematical, of students from the English department.

II. Three classes, Arithmetical and Mathematical, of students from the Sanscrit department.

III. Two classes of Popular Physics.

IV. Two classes of Nagdí and Mulkí.

106. The Arithmetical and Mathematical Classes of students from the English department were taught by Vishnu Pant, the head Vernacular Master, and by three students from the Normal department, from 6 to 7 A. M. every day. The classes from the Sanscrit department were taught by Vishnu Pant, the head Vernacular Master, and two Assistant Teachers from the School division of the English department, between 3 and 4 P. M. every day. The two Nagdí Mulkí Classes were taught by Vishnu Pant, the head Vernacular Master, and Vináyak Pant, the Assistant Vernacular Master, between 5 and 6 P. M. every day. The two Classes on Popular Physics received lectures from me, alternately for some time, and daily afterwards, between 7 and 8 A. M. each day.

107. The progress and studies of these several classes will be seen from the programme of the annual examination held in December 1854, and from the results of their examination.

KERU LAKSHMAN CHHATRE,

Assist. Prof. of Natural Philosophy in the Vernacular.

108. The following is a statement of the result of the examination of the Vernacular department:—

TRANSLATION CLASSES.

STUDENTS FROM THE ENGLISH DEPARTMENT.

109. 6th Class.

Teacher, KRISHNAJI GORBOLE.

No. on the roll..... 32

Present	20
Sick	4
Absent	8
	<hr/> 32

Studies.—The whole of McCulloch's Third Reading.

Remarks.—The class, with two or three exceptions, did very well. The Teacher has evidently taken great pains.

110. *5th Class.*

Teacher, KASHINATH THATHE.

No. on the roll	25
Present	14
Sick	3
Absent	8
	<hr/> 25

Studies.—The first 100 pages of the Series of Lessons.

Remarks.—This class did well, and reflects credit on the Teacher.

111. *4th Class.*

Teacher, NARAYAN DEODHAR.

No. on the roll	27
Present	22
Sick	2
On leave.....	1
Absent	2
	<hr/> 27

Studies.—Series of Lessons, from 100 to 200 pages.

Remarks.—This class contains a few good scholars, but, as a whole, it does not do so well as the class below it. The Teacher is very intelligent, and will doubtless improve it. Some of the best scholars of this class were lately transferred.

112. *3rd Class.*

Teacher, BHAU SHASTRI PAITKAR.

No. on the roll	24
Present	21
Sick.	1
Absent on account of mourning	2
	<hr/> 24

Studies.—The first 150 pages of the Course of Reading.

Remarks.—This class is not very equal. Some did pretty well, but others in an inferior way. Under its intelligent Teacher the class will doubtless soon improve.

113. *2nd Class.*

Teacher, NARSINH SHASTRI OK.

No. on the roll.....	30
Present	29
Absent	1
	— 30

Studies.—Four sections of McCulloch's Course of Reading.

Remarks.—There are some very intelligent students in this class. Both this class and the former have done pretty well, considering the great difficulty of the subject.

114. *1st Class.*

Teacher, Assistant Professor KRISHNA SHASTRI CHIPLODKAR.

No. on the roll.....	18
Present	15
Sick	3
	— 18

Studies.—The whole of Clift's Political Economy, from the 1st chapter.

Remarks.—This is a very intelligent class, and the students acquitted themselves well. The Assistant Professor has evidently taken pains with them.

LITERATURE CLASSES.

STUDENTS FROM THE ENGLISH DEPARTMENT.

115. *9th Class.*

Teacher, NARAYAN DEODHAR.

No. on the roll	29
Present	26
On leave.....	2
Absent	1
	— 29

Studies.—Popular Stories of Elephants; a little Parsing and Dictation.

Remarks.—This class has some good readers, and some

inferior ones. Their parsing pretty good, and their knowledge of meaning pretty good.

116.

8th Class.

Teacher, BHIKAM BHAT.

No. on the roll	36
Present	30
Sick	4
Absent	2
	— 36

Studies.—Popular Stories of Elephants ; a little Parsing ; Dictation ; and Bál Vyákaran.

Remarks.—One or two students of this class must go into the lower class. The rest read very well. Their knowledge of meaning is good ; their parsing good, and writing from dictation good. The state of the class is very creditable to the Teacher.

117.

7th Class.

Teacher, KRISHNA DATAR.

No. on the roll	16
Present	15
Absent	1
	— 16

Studies.—Life of Captain Cook ; some pages of the Catechism of the History of the Maráthás ; a little Parsing and Dictation.

Remarks.—The reading of this class is good ; parsing fair ; apprehension of meaning fair ; writing from dictation fair ; knowledge of Maráthá History good. The state of the class is respectable.

118.

6th Class.

Teacher, SAKHARAM PHADKE.

No. on the roll	26
Present	24
Sick	2
	— 26

Studies.—Esop's Fables ; Life of Cyrus, 105 pages ; Parsing ; Dictation.

Remarks.—This is a pretty good class. Reading good ; grammar fair ; writing from dictation pretty good.

119.

5th Class.

Teacher, SAKHARAM BHAGWAT.

No. on the roll	26
Present	22
Sick	3
Absent	1
	— 26

Studies.—Life of Socrates ; Parsing ; Dictation ; Catechism of the History of the Maráthás, as far as the Administration of Mahádhow Row II.

Remarks.—The reading of this class is, generally speaking, good ; the apprehension of meaning good ; grammar fair ; Catechism of Maráthá History fair ; writing from dictation very good.

120.

4th Class.

Teacher, VINU TOPI.

No. on the roll	17
Present	13
Sick	3
Absent	1
	— 17

Studies.—Life of Cyrus, the whole ; Parsing ; Dictation ; Catechism of the History of the Maráthás, as far as the Administration of Mahádhow Row II.

Remarks.—The reading of this class, with one or two exceptions, is very good ; their knowledge of the Catechism of the History of the Maráthás is good ; writing from dictation fair.

121.

3rd Class.

Teacher, VINAYAK PANT GOKHLE.

No. on the roll	31
Present	25
On leave	2
Sick	3
Absent	1
	— 31

Studies.—History of the Maráthás, Vol. I. 8 chapters ; Parsing ; and correct Writing.

Remarks.—The reading of this class is very good, and their

knowledge of meaning good ; writing from dictation of most very good ; grammar good. The class is a respectable one.

122.

2nd Class.

Teacher, KRISHNAJI GORBOLE.

No. on the roll	24
Present	20
Sick	3
Absent	1
	— 24

Studies.—The first 9 chapters of the History of the Maráthás, Vol. I. ; Dadoba's Grammar, from the inflections of Nouns to Pronouns, and the Chapter on Verbs as far as Defective Verbs ; Principles of Punctuation, by Major Candy. Parsing ; and correct Writing.

Remarks.—The reading of this class, with a few exceptions, is very good ; apprehension of meaning good ; grammar fair ; writing from dictation of most very good ; knowledge of history fair. The class is a good one, with the exception of one or two students.

123.

1st Class.

Teacher, NARSINH SHASTRI OK.

No on the roll	28
Present	23
Sick	3
On leave	2
	— 28

Studies.—History of British India, 10 chapters ; Readings from Dadoba's Grammar ; Parsing ; Dictation ; Correcting wrong Sentences ; Alaukár Viveka, first 40 pages.

Remarks.—The reading of this class is very good, with a few exceptions ; grammar good ; history good ; dictation very good. It is a good class. The Teacher has evidently taken pains.

ARITHMETICAL, MATHEMATICAL, AND GEOGRAPHICAL CLASSES.

JUNIOR STUDENTS FROM THE ENGLISH DEPARTMENT.

124.

4th Class.

Teacher, SADASHIW SAHASRABUDHÉ.

No. on the roll	38
-----------------------	----

Present	26
On leave	2
Sick	3
Absent	7
	— 38

Studies.—Arithmetic, as far as the Rule of Three; and General Geography of Asia.

Remarks.—The progress of this class is fair, as regards both arithmetic and geography.

125. *3rd Class:*

Teacher, SAKHARAM PHADKE.

No. on the roll	32
Present	28
Sick	1
Absent	3
	— 32

Studies.—Integral Arithmetic, the whole; and General Geography of Asia.

Remarks.—This class has done well.

126. *2nd Class.*

Teacher, BHIKAJI ANANT.

No. on the roll	30
Present	25
Sick	3
Absent	2
	— 30

Studies.—Fractional Arithmetic, as far as Arithmetical Progression; Maps of Asia, and Europe, according to Bál Shástrí's Primer.

Remarks.—State of the class fair.

127. *1st Class.*

Teacher, VISHNU PANT TAMHANKAR.

No. on the roll	32
Present	28
Absent	4
	— 32

Studies.—Three Books of Euclid; Algebra as far as Simple Equations; General Geography of the Four Quarters of the Globe.

Remarks.—This is a good class; arithmetic good; geography fair.

Studies.—Village Book, the second and third forms.

Remarks.—The answers given were fair.

136. 1st Class.

Teacher, VISHNU PANT TAMHANKAR.

No. on the roll 13

Present 11

Absent 2

13

Studies.—Village Book, the whole; and Táluká Book, 15 pages.

Remarks.—The upper half of this class answered well; the lower half is inferior.

IV.—NORMAL DEPARTMENT.

137. This important department, I am happy to say, is in an efficient state. Both teachers and students are animated with a right spirit.

138. Twelve Normal students received appointments in the course of 1854: one as Teacher to the sons of the Desái of Sávunt Wádí, and eleven as Schoolmasters. Of these 9 have gone to Schools in the 1st Division, and two to Schools in the 3rd Division. Besides the 12 that have received appointments, two have resigned, one on account of continued sickness, and one to join the Engineering School, for the studies of which he had considerable aptness. A list of the students who have left will be found in the Appendix.

139. In June last, 10 additional Normal Scholarships were founded, making the total number 30, instead of 20, the original number. The additional scholarships are to be paid from the General Fund, till the funds of the Poona College can defray the charge.

140. The following are the Reports of the Assistant Professors on this department:—

REPORT BY ASSISTANT PROFESSOR KRISHNA.
SHIASTRI CHIPLONKAR.

141. In this department there were 18 pupils at the end of the last session. Out of these 18, 1 has resigned his scholarship, in consequence of a lingering and extreme illness, and during the course of the year 12 more were sent at different times to different places ; some as Head Masters, some as Assistant Masters, and one as a Tutor to a Native Chief. Besides these vacancies, there were 10 more, in consequence of the order of the Board, desiring to increase the total number of the stipendiary students in the department from 20 to 30. These vacancies were filled from different sources : some men were taken from the higher classes of the English department ; some from the Sanscrit department, on account of their acquirements in that language ; and some from the Vernacular Schools, both in the city and in the districts, on account of their respectable acquaintance with Mathematics, Maráthí Grammar, common History, &c. Before obtaining a scholarship, the candidate was required to undergo an examination before the Principal, and attention was always given to his intelligence and diligence, and his general standing in the class from which he was taken. I think we have reason to flatter ourselves, that our choice is generally successful.

142. All the 30 students are arranged in different classes for their different studies, according to their acquirements. The boy who learns English in the 1st Class oftentimes studies Mathematics in the 2nd or 3rd Class, and so forth. For English studies, the department is divided into three classes. The 1st I have taken under my own

management, and the other two are taught by the Translation Exhibitioners.

143. The 1st Class underwent a good many changes during the session. A good many students were sent out at different times, and a good many have been admitted into the class. The class at the end of the session contained scarcely half the number of the old pupils. The students who were received into the class from time to time were obliged to go on with the subjects taught in the class. The class, in consequence, may be considered somewhat unequal. The undesirable effects of this inequality have been mitigated in a considerable degree by devoting some time of the class before the examination to the revision of the subjects taught during the year. At the time of the revision, each student was desired to read carefully a certain portion, and mark the difficulties, which, when asked, I endeavoured to explain in the class.

144. I have read with my class seven chapters of Clift's Political Economy, the History of the British Empire as far as the end of the reign of Charles II., and a hundred pages of Chambers' Exemplary Biography. Besides this, the students were required to write once a week from dictation. I stated in the last report the considerations that led me to choose the Biography as a class-book. Political Economy was selected on the consideration that the old students in the class were already pretty well acquainted with the leading principles of that science, through my lectures on it delivered in the Vernacular last year, while the new ones were learning the same subject this year in Maráthí. In teaching Biography, I always endeavoured, as far as it lay in my power, to make the pupils understand the spirit, and feel the importance of what they read. In Political Economy, their attention

was particularly directed to general principles, and to the connected view of the subject. In History, they were required to remember the important events of the different periods, and to understand the connection that often exists between them.

145. The 2nd Class has also experienced many changes during the last year. The boys have read with Narsinh Shástrí the first four sections of the Elementary Course of Reading, except the poetical pieces, and the first three chapters of Marshman's History of India. They have also learned several Latin and Greek Roots, and their derivatives, and used to write often from dictation. I have great pleasure to state here that Vishnu Pant Támhankar, the Head Master in the Vernacular department, used to join this class regularly during the whole session. Though of a pretty advanced age, he evinces a laudable desire of increasing his knowledge, and keeping up with the spirit of the times.

146. The 3rd Class comprehends all the students recently admitted into the department. The class was formed in the month of July. The students have learned the First and Second Reading Books of McCulloch, and the first section of the Third Reading Book.

147. *Grammar*.—The Class of Grammar was formed of all the old students. It is under my tuition. I have read with them the chapters on "Verbs" from Dádobá's Grammar. I did not confine myself to the text-book, but tried to explain to the pupils many of the general principles of universal grammar; and occasionally we were employed in examining the points of grammar in which the English, Sanscrit, and Maráthí languages resemble and differ from each other.

148. *Political Economy*.—All the pupils who were

admitted during last year were formed into a class for Political Economy. As students were admitted at different times, the class is rather unequal. To this class I have delivered several lectures on Political Economy. My lectures comprehended the definition of wealth, its nature, and its importance to individual man, and to society in general; its three principal causes,—labour, natural agents, capital,—and the nature and division of each.

149. *History, Geography, Book-keeping, &c.*—These subjects are taught by Vishnu Pant Tāmbankar, in whose class all students attend one hour every day. This class has learned the first hundred pages of the Introduction to the History of India by Bāl Gangādhār Shastrī, and the first three chapters of Sullivan's Geography generalized, translated by Mahādeo Shāstrī Purānik, formerly a Translation Exhibitioner in the College.

150. How the students have acquitted themselves, and how much progress they have made, will be easily and clearly ascertained by a reference to the table of marks which each pupil has received in his various examinations. The table will be found in the sequel.

KRISHNA SHASTRI CHIPLONKAR,
Assistant Professor of Vernacular Literature.

REPORT BY ASSISTANT PROFESSOR KERU LAKSH-
MAN CHHATRE.

151. The call on the students of the Normal department to fill Schoolmasterships in the districts by Mahādeo Govind Shāstrī, Esq., Superintendent of Vernacular Schools 1st Division, has been so great, that out of the 18 Normal students at the beginning of the year, only 6 now remain with us. The salaries, as well as the places of their destination, are given in a list appended to this report.

152. The Board have now increased the Normal department from 20 to 30 paid students. There are also at present 8 candidates. At the end of the year 1854, the Normal department consisted of 27 paid, and 8 unpaid students, making in the whole 35.

153. In consequence of nearly the whole of our old students giving place to new ones, with an addition of 10 additional students, as per Board's order, and some candidates, the whole of the Normal department was as if renewed again. In this gathering there were some from the Sanscrit department, some from Vernacular Schools, either in the city of Poona or outstations, and some from the English department. One class could not be formed of all of these together, so that all of them might begin their Normal studies at the same time in the same branch. I was obliged to divide them into four Mathematical classes, viz:—

1st Class.

154. This class now consists of only one student, his colleagues having been appointed Schoolmasters in the districts. He attended me from 5 to 6 p. m. every day. His studies during the last year were Differentiation of Implicit Functions, &c. ; Analytical Geometry of rectangular and polar co-ordinates; Analytical Equations of some important curves, tangents to curves; differentials of the areas and lengths of curves, of the surfaces and volumes of solids of revolution; spirals; singular points in the curves, multiple points, cusps; curvature and osculating curves; envelopes to curves; caustics; LaGrange's Theorem; and six chapters of Integral Calculus, comprising simple integration, integration of rational fractions, irrational, logarithmic, exponential, and circular functions, determination of the areas of curves, lengths of curves, volumes of

solids, and surfaces of solids by integration. This student, though well up, fell sick just before the examination, so that he could not be examined.

2nd Class.

155. Like the 1st, the 2nd Class has been also much decreased by the appointments of students to outstations. There are now only four left in this class. During the preceding session, this class, having revised Differential Calculus, which they learned under Vináyak Pant, went over Conic Sections, from Rutherford's edition of Hutton's Mathematics; Mensuration of Planes and Solids; and Analytical Geometry from Hall's Differential Calculus, comprising the following subjects, viz. analytical expressions for rectangular co-ordinates; equations of most important curves; equations to tangents to curves; spirals; differentials of the areas and lengths of curves; and of the surfaces and volumes of solids of revolutions.

156. In Astronomy, these two classes were joined into one, and received lectures twice every week. The theory of the elliptic motion of the earth and planets has been explained to them.

157. The remaining 29 students, namely 21 paid and 8 candidates, having to begin their instructions as Normal scholars, were divided into two classes. The students that came from the English department having finished one or two books of Euclid, it was thought proper to form them into one class, and go on with Euclid; they also revised Algebra. The other students, coming from the Vernacular Schools, knew Hutton's Geometry as far as the 60th proposition. They were therefore formed into another class, and revised Algebra and Geometry, and finished Hutton's Geometry.

158. These two classes were joined into one three times every week, for lectures on Popular Physics. Instructions on the general properties of bodies and laws of motion were given to them this year.

159. All the students were also collected together once every week, on Saturday, for instruction in Physical Geography; the work read was Mahádeo Shástrí Puránik's Translation of Sullivan. At the examination in December, they were examined in the first three chapters.

160. Vishnu Pant Támhankar, the Head Vernacular Teacher, also took them once every week for Nagdí Mulkí.

KERU LAKSHMAN CHHATRE,

Assist. Prof. of Natural Philosophy in the Vernacular.

161. The following is the result of the examination of the Normal classes in English:—

162. 3rd Class.

Teacher, BHAU SHASTRI PAITKAR.

No. on the roll.....	15
Present.....	14
Sick.....	1
	— 15

Studies.—McCulloch's First and Second Books, and the first part of the Third Reading Book.

Remarks.—This class did very well. The reading of the greater part is clear and distinct, and the apprehension of meaning good. The Teacher has taken pains, and the pupils have been diligent.

163. 2nd Class.

Teacher, NARSINH SHASTRI OK.

No. on the roll.....	8
Present.....	7
Absent.....	1
	— 8

Studies.—Four sections of the Elementary Course of Reading, excepting the Poetical Pieces; the first three chapters of Marshman's India; some Roots; Dictation; and Parsing.

Remarks.—This class also did pretty well. There are one or two inferior readers at the bottom, and the pronunciation of some is not good, but it is better than it was. The Teacher has taken pains.

164.

1st Class.

Teacher, Assistant Professor KRISHNA SHASTRI.

No. on the roll..... 13

Present 13

Studies.—Chambers' Exemplary Biography, from page 110 to 210 ; Clift's Political Economy, first seven chapters ; Chambers' British Empire, till the accession of James II. ; Dictation.

Remarks.—The reading of this class is good ; the apprehension of meaning good ; the knowledge of history good ; writing from dictation good ; knowledge of the principles of political economy fair.

165. A table of the marks gained by the Normal students in their different studies will be found in the Appendix.

V.—SANSKRIT DEPARTMENT.

166. Some of the observations which I made on this department in my last Report are equally applicable now, but I need not repeat them here. The state of the department has rather improved than gone further back.

167. The number of students of the purely Sanscrit department at the time of examination was :—

Stipendiary 10

Non-stipendiary 114

— 124

Which are thus distributed in the four branches, viz :—

Alankār and Kāvya..... 47

Nyāya 12

Vyākaran 38

Dharm 27

— 124

168. The junior students in every branch, as stated before, study the Rupávalí, &c. in it.

169. The examination of the classes taught in the purely Sanscrit department was conducted by the Committee of Pandits appointed for the purpose. The examination of the classes of Sanscrit taught in the Normal and English departments was conducted by Assistant Professor Krishna Shástrí Chipionkar and myself.

170. Of the 124 students mentioned above, only 96 were examined ; 28 were absent on different accounts. There were also 14 students of the English and Normal departments who had studied in the Sanscrit department, and were examined with the 96. The following is the result of the examination of the 110 students :—

Result in the particular Shástra studied.

Branches.	Excellent. 1.	Excellent. 2.	Excellent. 3.	Middling. 1.	Middling. 2.	Middling. 3.	Inferior.	Total.
Alankár and Kávyá....	6	7	8	11	8	2	..	= 42
Nyáya	2	1	3	1	1	..	..	= 8
Vyākaran.....	7	7	4	9	3	1	..	= 31
Dharm	2	5	3	12	7	..	..	= 29
								— 110

Result in Wyutpatti.

Branches.	Excellent. 1.	Excellent. 2.	Excellent. 3.	Middling. 1.	Middling. 2.	Middling. 3.	Inferior.	Total.
Alankár and Kávyá . .	4	6	7	6	1	3	15	= 42
Nyáya	2	1	..	..	2	1	2	= 8
Vyākaran	1	7	3	6	3	..	11	= 31
Dharm .. ..	..	4	3	4	..	..	18	= 29

171. The senior students, of this department were required to write essays in Sanscrit before the Committee.

The subject I gave was Female Education. Some of them are creditable to the writers, especially that of Rangá-charya, which I give in the Appendix.

172. The following is the result of the examination of the Sanscrit classes in the Normal and English departments:—

173. *1st (highest) Class.*

(Class of Assistant Teachers.)

Teacher, Assistant Professor KRISHNA SHASTRI CHIPLONKAR.

No. on the roll	8
Present	7
On leave	1
	— 8

Studies.—The 5th and 6th Sargs of Raghu Wansh.

Remarks.—This class contains some very intelligent young men, who are making good progress. One or two are indifferent.

174. *2nd Class.*

(Class of Normal Students.)

Teacher, NARAYAN SHASTRI ABHYANKAR.

No. on the roll	15
Present	13
Sick	2
	— 15

Studies.—Rupávalí; and 25 pages of 1st Reader.

Remarks.—This class did pretty well.

175. *3rd Class.*

(Class of Normal Students.)

Teacher, GOPAL SHASTRI GOKHLE.

No. on the roll	9
Present	9

Studies.—Second Sanscrit Reader, 60 pages.

Remarks.—This class did well.

176. *4th Class.*

(Students of the English College Division.)

Teacher, NARAYAN SHASTRI ABHYANKAR.

No. on the roll	5
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Present	4
Absent	1

Studies.—Second Sanscrit Reader, 60 pages.

Remarks.—Two students did well; the rest made a poor appearance.

177. *5th Class.*

(Students of the English College Division.)

Teacher, KRISHNA SHASTRI WAIJAPURKAR.

No. on the roll	5
Present	3
Sick	2
	<hr/> 5

Studies.—First Sanscrit Reader, one half; and 50 pages of the Second Sanscrit Reader.

Remarks.—These students did pretty well.

178. *6th Class.*

(Students of the English School Candidate Class.)

Teacher—GOPAL SHASTRI GOKHLE.

No. on the roll	4
Present	4

Studies.—First Sanscrit Reader; 25 Shloks of the first Sarg of Raghu, and some miscellaneous Shloks.

Remarks.—This class has done well.

179. *7th Class.*

(Students of the English School Candidate Class.)

Teacher, GOPAL SHASTRI GOKHLE.

No. on the roll	8
Present	7
Sick	1
	<hr/> 8

Studies.—Second Sanscrit Reader, 50 pages; 15 Shloks of the 4th Sarg of Raghu; 30 miscellaneous Shloks.

Remarks.—This class has done well.

180. *8th Class.*

(Students of English School Classes.)

Teacher, KRISHNA SHASTRI WAIJAPURKAR.

No. on the roll	8
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Present	7
Sick	1
	— 8

Studies.—First Sanscrit Reader, one half; Second Sanscrit Reader, 50 pages.

Remarks.—The class has done pretty well.

VI.—DEPARTMENT OF TRANSLATION.

181. This department has been weak throughout the year. At the beginning of 1854, there were two Translation Exhibitioners, but only one was effective. The other was acting Master of the School at Kurrachee, in which appointment he has since been confirmed. In March an examination of competitors was held, when Bháu Shástrí Paitkar gained an exhibition. He will prove, I hope, an efficient Translator. In June, another examination was held, when Báلكrishna Sakhárám Moné, the head Assistant Teacher of the School division of the English department, who had been diligently studying Sanscrit, gained an exhibition. He fell sick immediately afterwards, and in about a month he resigned his exhibition, to qualify himself for another department of the Public Service. In November another examination was held, but none of the competitors were successful. So, for a part of the year there was only one, and for the remaining part two Exhibitioners effective.

182. These two have been employed in teaching as well as in translation. They have also attended classes as students.

183. The work done by them respectively is as follows:—

NARSINH SHASTRI 'OK.

Translation of 120 pages of Murray's India. The translation will occupy nearly 250 octavo pages.

BHAU SHASTRI PAITKAR (*from April*).

Translation of 100 pages of the History of Greece. The translation will occupy more than 180 pages.

184. I have not yet received from Náráyan Shástrí Apté the fair copy of the translation of Euclid which he did when he was a Translation Exhibitioner. He has been revising it.

185. The translation of Sullivan's Geography generalized, which Mahádeo Shástrí Puránik did before he went to Kurachee, has occupied most of my time not spent in the College since April. I found it *very creditably* done as to its general execution, but, partly from inattention, and partly from not always apprehending the niceties of the original, the Translator had made so many mistakes, and some of them were of so serious a kind, that I felt it necessary to go through the whole book, comparing it line by line with the original. Numerous alterations were the consequence. The correction of the work, and carrying it through the press, occupied months. It is now a very useful work. As it is a scientific work, perfect accuracy was requisite, otherwise so much trouble need not have been taken with it.

186. Besides the above, I revised my edition of Bál Mitra for a new edition, which was carried through the press in the course of the year. I made, also, a little progress with the Geography of Hindustan. This work I desire to finish with all the expedition, consistent with accuracy, that circumstances will allow. For this reason, I venture to postpone the change which for some time I have felt to be necessary.

VII.—BRANCH SCHOOL.

187. The state of this School is very satisfactory, both as respects the number and the progress of the scholars, and reflects much credit on the Master, Mr. Sakháram Bákrishná.

188. The number on the roll at the examination of 1853 was 118. The number at the examination of 1854 was 148, all of whom pay a School fee.

189. The following is the result of the examination :—

ENGLISH DEPARTMENT.

190. *Class VI.—2nd Division.*

Teacher, HARI BALKRISHNA.

No. on the roll.....	27
Present	24
Sick	2
On leave.....	1
	— 27

Studies.—McCulloch's First Reading Book, the whole.

Remarks.—Passed a very good examination ; articulation generally distinct.

191. *1st Division.*

Teacher, HARI BALKRISHNA.

No. on the roll.....	12
Present	11
Sick	1
	— 12

Studies.—McCulloch's Second Reading Book, the whole ; School Dialogues, 5 lessons.

Remarks.—Pretty well ; but not quite equal to the 2nd Division.

192. *Class V.*

Teacher, DADABA SAKHARAM.

No. on the roll.....	23
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Present	21
Sick	1
Absent	1
	<hr/> 23

Studies.—McCulloch's Third Reading Book, 40 pages ; Reid's Grammar, Definitions, with Parsing ; a little Geography of Asia.

Remarks.—Pretty well at the top, but the class unequal ; very good in geography.

193.

Class IV.

Teacher, BAMANJI MERWANJI,

No. on the roll.....	26
Present	25
Sick	1
	<hr/> 26

Studies.—McCulloch's Third Reading Book, 125 pages ; Reid's Grammar, 13 pages, with Parsing ; Geography of Europe.

Remarks.—Pretty well.

194.

Class III.

Teacher, RAMBHAJI THORAT.

No. on the roll.....	20
Present	20

Studies.—Chambers' Moral Class-book, 83 pages ; Davy's History of England, to the end of the Reign of James I. ; Reid's Grammar, 33 pages ; Catechism of the History of the Maráthás, from page 19 to 34 ; Geography of the Four Quarters.

Remarks.—Knowledge of history very good ; geography fair ; grammar middling ; dictation not good ; reading inferior.

195.

Class II.

Teacher, KONDU AMRIT.

No. on the roll.....	22
Present	21
Sick	1
	<hr/> 22

Studies.—McCulloch's Series of Lessons, 101 pages ; Marshman's History of India, 8 chapters ; Reid's Grammar, the whole ; Catechism of the History of the Maráthás, from page 22 to 45 ;

Geography of the Four Quarters; Roots from Series of Lessons, the whole; Writing from Dictation.

Remarks.—Reading good; knowledge of history very good; grammar fair; roots fair; dictation very good.

196.

Class I.

Teacher, SAKHARAM BALKRISHNA.

No. on roll	18
Present	16
Sick	1
On leave	1
	— 18

Studies.—McCulloch's Course of Reading, 101 pages; Murray's History of India, 6th, 7th, 8th, and 9th chapters; Introduction to Universal History, Part I.; Ancient History, the whole; and Modern History of Great Britain and India; Exercises to Hiley's English Grammar on the Rules of Syntax, from page 27 to 62; General Geography of Europe, Asia, Africa, and America, with the particular Geography of India, and the British Isles; 600 Latin Roots, with Examples and Meanings; Writing from Dictation.

Remarks.—Knowledge of history very good; reading good at the top of the class; roots good; geography good; grammatical exercises very good; dictation very good. The class is in a very efficient state.

MATHEMATICAL DEPARTMENT.

197.

6th (youngest) Class.

Teacher, DADoba SAKHARAM.

No. in the class	26
Present	19
Absent	7
	— 26

Studies.—Numeration and Addition of two figures.

Remarks.—This class consists of mere infants; can scarcely do any arithmetic.

198. *5th Class.*—Consists of two Divisions.

Teacher, HARI BALKRISHNA.

No. in the class	26
------------------------	----

Present	25
Absent	1
	<hr/> 26

Studies.—2nd Division : Subtraction ; 1st Division : Multiplication Table, and Multiplication.

Remarks.—The examples and questions given were readily answered by both divisions.

199. 4th Class.—Two Divisions.

Teacher of both Divisions, BAMANJI MERWANJI.

No. in 1st division	15
Present	14
Absent	1
	<hr/> 15
No. in 2nd division	21
Present	19
Absent	2
	<hr/> 21

Studies.—2nd Division : Long Division ; 1st Division : Tables, Reduction, and Compound Addition.

Remarks.—Neither of the divisions well taught.

200. 3rd Class.—Two Divisions.

Teacher of both Divisions, RAMBHAJI THORAT.

No. in the class	30
Present	27
Absent	3
	<hr/> 30

Studies.—2nd Division : Reduction, Compound Addition, and Subtraction ; 1st Division : Compound Multiplication and Division ; Simple and Compound Proportions.

Remarks.—There are a good many promising boys in both divisions. The Teacher has evidently done them justice.

201. 2nd Class.

Teacher, KONDU AMRIT.

No. in the class	20
Present	19
Absent	1
	<hr/> 20

Studies.—Simple and Compound Proportions, Partnership,

Simple Interest, Discount; Equations of Payment, Compound Interest; Vulgar Fractions, the whole; Decimal Fractions, to Multiplication.

Remarks.—The boys of this class are well practiced in the mechanical parts of arithmetic. They ought to have been made better acquainted with the principles of the science.

202. 1st Class.—Two Divisions.

Teacher of both Divisions, SAKHARAM BALKRISHNA.

No. in 1st division 4

No. in 2nd division 7

— 11

Studies.—2nd Division: Vulgar and Decimal Fractions; First and Second Books of Euclid; 1st Division: First Five Books of Euclid; Algebra; Simple Equations, containing one or two Unknown Quantities; Definitions and a few Formulæ of Plane Trigonometry.

Remarks.—The 2nd division has a very accurate knowledge of the 1st and 2nd Books of Euclid. The 1st division has a very good knowledge of the first four books of Euclid; not so well acquainted with the doctrine of ratios. The knowledge of algebra of both divisions is on the whole very accurate. Some of the young men, if they continue on for some time longer, will become very good analysts. The appearance made is on the whole very creditable.

VERNACULAR DEPARTMENT.

203. 1st Class.

Teacher, NARAYAN SHASTRI.

No. on the roll 16

Present 16

Studies.—History of the Maráthás, 100 pages; Bál Vyākaran, the whole; Parsing; Writing from Dictation; and Catechism of Maráthá History; Translation of Third Reading Book.

Remarks.—This class contains some very intelligent students. To the greater part of them Maráthí is a foreign language. When this is considered, their reading must be pronounced good.

They parse well, and understand the meaning of words. The Teacher has evidently been diligent.

204. *2nd Class.*

Teacher, NARAYAN SHASTRI.

No. on the roll	12
Present	10
Sick	1
Absent	1
	— 12

Studies.—England Delincated ; and Bál Vyákaran, the whole.

Remarks.—This class has made a respectable appearance.

205. *3rd Class.*

Teacher, NARAYAN SHASTRI.

No. on the roll	20
Present	17
Absent	2
Sick	1
	— 20

Studies.—Lipidhára and Jágtijot, the whole ; Catechism of Geography.

Remarks.—This class has done pretty well.

206. I beg to conclude the Report with the expression of my hope that it will be found satisfactory.

THOMAS CANDY, Major,
Principal of the Poona College.

Poona College, February, 1855.

APPENDIX A.

RESULTS OF THE EXAMINATION.

I.—SENIOR CLASS.

Result of Examinations in Subjects taught by Prof. of Literature.

Order of Merit.	Names.	Company's Regulations.	English Essay.	Total Marks obtained.	Full Value.
	Value ..	50	50	..	100
1	Atmáram Vináyak.	27	35	62	
2	Narsinh Shástrí Ok	33	25	58	
3	Vishwanáth Karmarkar.	47	11	58	
4	Páandu Sonár.	33	22	55	
5	Aná Sahasrabudhe.	15	27	42	
6	Yadneshwar Dáddájí	22	11	33	
7	Bábá Joshí	22	4	26	

II.—JUNIOR CLASS.

Result of Examinations in Subjects taught by Prof. of Literature.

Order of Merit.	Names.	Literature.	English Essay.	Psychology.	History.		Total Marks obtained.	Full Value.
	Value ..	50	50	100	Fixá voce.	Paper.	..	300
1	Dorábjí Padamjí ...	24	30	67	44	35	200	
2	Krishna Rádhalkar ...	33	16	41	50	26	166	
3	Náráyan Gopál ...	24	23	29	22	23	121	
4	Kashináth Vital ...	28	16	19	16	20	99	
5	Vishnu Kelkar ...	23	15	Absent	3	12	53	
	Náráyan Jagannath ...	39	36					
	Parshotam Bhat ...	34	40					
	Vináyak Bhide ...	27	30					

NOTE.—The last three students attended the Class in Literature only, and therefore are not ranked.

III.—FRESHMAN CLASS.

Result of the Examinations in the Subjects taught by the Professor of Literature.

Order of Merit.	Names.	Literature.	English Essay.	History, and History of Civilization.		Belles-Lettres.		Total Marks obtained.	Full Value.
				Viva voce.	Paper.	Viva voce.	Paper.		
	Value	50	50	50	50	50	50	..	300
1	Ráoji Gadbole.. ..	34	20	50	32	40	43	219	
2	Rámá Ok.. ..	38	33	35	27	40	35	208	
3	Navaróji Padamji ..	25	36	40	13	50	37	201	
4	Chintáman Sakhárám ..	46	27	34	20	30	29	186	
5	Luxumau Jagannáth ..	15	29	40	21	40	21	166	
6	Parshurám Gadbole ..	34	25	25	9	35	31	159	
7	Ráoji Puneekar.. ..	30	23	8	13	30	34	138	
8	Venkat Rámchandra ..	18	20	18	43	35	33	137	
9	Rámá Gadbole.. ..	15	14	15	8	30	22	104	
10	Prabhákar Joglekar ..	14	9	18	13	13	36	103	
11	Hari Bhútavadekar ..	22	5	28	6	10	28	99	
12	Bápu Abáji	17	14	13	3	..	14	61	
13	Shivarám Kánitkar.. ..	12	..	10	..	5	12	39	
14	Samuel Hanson	32	..	..	..	abs.	abs.	32	
15	Parshurám Sakhárám ..	11	9	3	abs.	abs.	abs.	23	

IV.—ASSISTANT TEACHERS' CLASS.

Mathematics.

Number, 7.

Order of Merit.	Names of Assistant Teachers.						Values.
							81.
1	Narsinh Shástrí Ok.. ..	..	..	..	..	..	60
2	Atmárám Pátkar .. ..	..	..	..	..	..	56
2	Yadneshwar Dádájí Gore ..	..	..	..	..	..	56
3	Pándu Sonár.. ..	..	..	..	..	..	52
4	Wishwanáth Karntarkar ..	..	..	..	..	..	41
5	Anná Sahasrabudhe ..	..	..	..	..	..	23
6	Bábá Joshi .. ..	..	..	..	..	..	20

N.—SENIOR CLASS.

Mathematics and Natural Philosophy.

Number, 7.

Order of Merit.	Names of Students.	Values.
		96.
1	Dorábji Padamjí	90
2	Krishna Rábhálkar	86
3	Purshotam Náráyan	80
4	Náráyan Jagannáth.	76
5	Cáshináth Vittal	72
6	Vishnu Kelkar	30

VI.—JUNIOR MATHEMATICAL CLASS.

Number in attendance, 29.

Order of Merit.	Names of Students.	Values.
		88.
1	Chinbas Appá	84
1	Nowrojí Padamjí	84
2	Shahábudín.	56
2	Wássudew Paránpze.	56
2	Bhumaya Sáenná	56
2	Venkatrow Rámchandra	56
3	Gangádhar Mehendale	54
4	Rámá Ok	48
4	Govind Ganesh	48
5	Rámá Gadbole	45
6	Dáji Nágpurkar	38
7	Ráwji Gadbole	32
8	Bálá Phadke.	24
9	Parshurám Gadbole.	18
10	Hari Bhátwadekar.	4

VII.—CHEMISTRY CLASS.

Order of Merit.	Names of Students.					Values.
						61.
1	Dorábji Padamji	..	..	..	..	55
1	Krishna Ráhákar	..	..	..	..	55
2	Naráyan Jagannáth	..	..	..	..	50
3	Vináyak Bhide .	..	..	..	..	40
3	Káshináth Vittal	..	..	..	..	40
4	Purshottam Náráyan	..	..	..	..	36
5	Naráyan Gopál .	..	..	..	..	30
6	Vishnu Kelkar ..	..	..	..	..	10

VIII.—COLLEGE DIVISION.—^oVERNACULAR.

<i>Junior Class.</i>					Vernacular Essay, 10.	Trans- lation, 10.
Naráyan Gopál	..	..	..	..	8	5
Govind Jagannáth	..	..	..	..	7	Abs.
Naráyan Jagannáth	..	..	..	..	7	7
Vináyak Bhide	..	..	..	..	7	5
Káshináth Vittal	..	..	..	..	7	5
Purshottam Náráyan	..	..	..	..	6	6
Krishna Ráhákar	..	..	..	..	6	4
Vishnu Kelkar	..	..	..	..	5	5
Dorábji Padamji	..	..	..	..	..	5

<i>Freshman Class.</i>	Vernacular Essay, 25.	Trans- lation, 15.
Rámá Ok	18	11
Chintáman Sakhárám	13	11
Ráwjí Ponekar.	13	10
Rámá Gorbole.	14	9
Lakshman Jagannáth.	7	9
Bháskar Sakhárám .. .. .	..	9
Nowrojí Padamjí .. .. .	..	9
Prabhákar Joglekar.	10	8
Náná Wakíl. . . . .	..	8
Bápu Abají	10	8
Samuel Hanson .. .. .	..	8
Parshuram Gorbole.	10	8
Balwant Shankar .. .. .	..	7½
Ráwjí Gorbole	18	7½
Wyankat Ramchandra .. .. .	..	7
Parshurám Sakhárám .. .. .	..	7
Lakshman Patwardhan .. .. .	..	6
Hári Bhátwadekar	12	6
Sivarám Kánitkar	4	5

Paid.		NAMES.	Class.	ENGLISH STUD		
				Reading.	Diction.	History.	Biography.
Number of full Marks..				4	12	4
Senior Students.	1	Krishna Godbole	1st	1	12	4
	2	Nárāyan Deodhar .. .. .	..	2	12	4
	3	Sakhārām Bhāgwat	2nd	3½	11	..
	4	Sakhārām Phadke	1st	1	6	2
	5	Vinú Tope .. .. .	..	2	10	2
	6	Bhikam Bhat, left during the Examination.	..	..	..	..
1	Bálkrishna Gurjar .. .. .	..	4	12	4	
2	Krishna Dátar .. .. .	..	2	12	4	
3	Kashináth Thatte .. .. .	..	4	12	4	
4	Shivrām Dánte .. .. .	..	4	12	4	
5	Nárāyan Nátú .. .. .	..	1	12	4	
6	Sadú Sahasrabudhe .. .. .	..	2	12	4	
7	Hári Dámle .. .. .	..	1	10	4	
8	Sadú Limaye .. .. .	..	1	10	2	
9	Ganú Ránade	2nd	3½	11	..	
10	Morú Dhárap	3rd	} Not sufficient vanced to have M	..	..	..
11	Bápu Joshí .. .. .	..		..	..	..
12	Bhāskar Abhyankar .. .. .	..		..	..	..
13	Náná Phádke .. .. .	..		..	..	..
14	Venkú Deavid .. .. .	..		..	..	..
15	Nárāyan Yogi .. .. .	..		..	..	..
16	Nárāyan Gurjar .. .. .	..		..	..	..
17	Ganú Bápat .. .. .	..		..	..	..
18	Bálkrishna Kálgánwkar .. .. .	..		..	..	..
19	Sopána Thákúr .. .. .	..		..	..	..
20	Vinú Joglekar .. .. .	..		..	..	..
21	Vishnu Joshí .. .. .	..	..	..	..
Candidates.						
1	Hári Mahádeo	1st	2	4	2	..
2	Keshow Gokhle	2nd	3	7	..	..
3	Vinú Phadke .. .. .	..	2½	4	..	..
4	Rámá Velankar .. .. .	..	1	4	..	..
5	Ganú Kolhápuzkar	3rd	..	..	..	..

Not sufficient
vanded to have

APPENDIX B.

SELECTIONS FROM EXAMINATION PAPERS.

JUNIOR CLASS.

History.

1. Continental possessions of Henry II. at his accession? His titles to them? How did he afterwards acquire Brittany?

2. General state of Europe at the accession of Henry II.? State of France at this period? Contrast the power of Henry II. and the French King. Different working of the Feudal System in their respective countries?

3. State the principal provisions of the *Constitutions of Clarendon*, and give a brief account of the circumstances which led to their enactment. What *principle* did Henry establish, by passing so many ecclesiastical ordinances in a national and civil assembly?

4. Circumstances under which the conquest of Ireland was effected? On what pretence did the Pope claim a right to dispose of this country? In these early ages, by what expedient alone could a conquest be permanently maintained? To what extent was this policy pursued, to secure the conquest of Ireland, and with what result?

5. Under what circumstances was Cardinal Langton appointed Primate? How did John resent the appointment? Name the sentences, in their order, which were fulminated against John by the Pope, and describe the effect of each.

6. State the principle articles of Magna Charta, as affecting the clergy, the barons, and the people. By what article was all check on appeals to Rome removed? Moderation of the barons, in not having insisted upon *some* of the articles of Henry I.'s Charter? What was the only article in favour of the villains or rustics.

WILLIAM DRAPER,
Professor of English Literature.

Psychology.

1. State the general principles of the four ~~great~~ Schools or Systems of Philosophy—Sensualism, Idealism, Scepticism, and Mysticism.

2. Fundamental principle of the System of Locke? Difference between the System of Locke and that of Condillac? Legitimate moral consequences of Condillac's system?

3. The regular methodical order of Psychological problems, as stated by Cousin? In what way has Locke proceeded? The *merit* of Locke's method, and *its fault*? Chances of error which his first mistake of method involves?

4. Give a definition of Consciousness, and distinguish between Consciousness and Reflection.

5. Cousin states three fundamental characteristics as distinguishing the idea of Body from the idea of Space? The idea of space in Locke's system resolves itself into the idea of body? Yet, according to Locke himself, the two ideas are quite distinct?

6. Distinction between the *Logical* order and the *Chronological* order of ideas? *Logically*, Kant is right, in maintaining that the pure idea of space is the condition of the idea of body and of experience; and *chronologically*, Locke is right, in holding up experience (namely sensation) as the condition of the idea of space, and of the development of the reason?

FRESHMAN CLASS.

Belles-Lettres.

1. Define Criticism. Upon what is it founded? Uses in criticism of delicacy of taste and of correctness of taste, respectively?

2. Difference between Taste and Genius?

3. The fundamental quality of Style? Distinguish between purity and propriety of language. What, according to Blair, is the only *standard* either of purity or of propriety?

4. Distinguish between—Custom and Habit; Pride and Vanity; Wisdom and Prudence; a Difficulty and an Obstacle; an Invention and a Discovery.

5. Blair's opinion concerning the origin of Language ? What were the first elements, or beginning of speech ?

6. Describe the following styles :—the Dry, the Plain, the Neat, the Elegant, the Flowery.

History, and History of Civilization.

1. Short account of the Wars of Charlemagne ? Grounds of hostility between Charlemagne and the Lombard King Desiderius ? Extent of the Western Empire established by Charlemagne ? Influence of Charlemagne on the progress of civilization ?

2. Describe the Feudal System. Among what people did this system first receive a complete form ? Whence arose the inextinguishable hatred that the country-people have at all times borne to the feudal system ? Influence of the system on the development of the individual, and on the social state ? The only *political right* that the feudal system has given prevalence to in the European society ?

3. Charles the Bald may be considered the founder of the French monarchy, properly so called ? Extinction of the Carolingian dynasty ? A change of dynasty was rendered inevitable in France by the condition of the State ? Limited power of Hugh Capet ?

4. What does Guizot mean by *the Church* ? The Church in the fifth century shed upon Europe *three essential blessings* ? The Church was exposed to two different lines of temptation, both tending to the acquisition of power ? *Two conditions*, which imply the goodness of government in general, civil or religious ? What was the state of the Church from the fifth to the twelfth century, with respect to these conditions ?

5. Extent of the Saracenic conquests during the reign of the Khaliph Omar ? Characteristic difference between the Saracenic and the German invasions ? Internal improvements introduced by Omar ? His character ? Circumstances under which the Omayyad dynasty was founded ? What revolution led to the dismemberment of the Saracenic Empire ?

SENIOR CLASS.—*Mathematics and Natural Philosophy.* (Paper.)
Statics.

1. Two chords, A B, A C, of a circle, represent two forces: one of them, A B, is given—find the position of the other, when the resultant is a maximum 8
2. Find the centre of gravity of a spheric segment. 20
3. From a given rectangle A B C D of uniform thickness, to cut off a triangle C D O, so that the remainder A B, C O, when suspended at O, shall hang with A B in a vertical position. 20

Dynamics.

1. If Q be the area of any curve whose polar co-ordinates are r and θ : then prove that $dQ = \frac{r^2 d\theta}{2}$ 8
 2. Demonstrate that the area described by the radius vector of any orbit is proportional to the time of its description 30
-
- Total. 86

JUNIOR CLASS.—Paper.

Analytical Plane Trigonometry.

1. One angle of a triangle is 18° , and another 54° , and the least side is 96 feet: find the greatest. 4
2. Determine A from the equation $1 + 2 \sin 4A = 4 \sin 3A \cos A$ 6
3. Given $1 - \sin a = 2 \sin^2 (x - \frac{1}{2}a)$: find x 8
4. If $\sin \phi = m \tan \theta$ and $\sin \theta = n \tan \phi$, find $\cos \theta$, in terms of m and n 10
5. Prove that the area of a triangle $= \frac{1}{4} (a^2 + b^2 - c^2) \times \cot \frac{1}{2} (A + B - C)$ 10
6. A staff 1 foot long stands at the top of a tower 200 feet high: show that the angle which it subtends at a point in the horizontal plane 100 feet from the base of the tower is $7'$ nearly 10

Astronomical Problems.

Apply the spherical formula already investigated to the solution of the following astronomical problems:—

1. The right ascension of the star Aldebaran is $67^{\circ} 40'$, and its declination $16^{\circ} 8' N.$: it is required to find the latitude and longitude. 10
 2. To a place having north latitude $52^{\circ} 12' 35''$, when does the sun rise and set, and what are the rising and setting azimuths, the sun's declination being $16^{\circ} 0' 46''$, no account of its daily variation or of refraction being taken. 10
 3. It is required to find the distance between the stars Capella and Procyon, the right ascensions being respectively $75^{\circ} 21' 19''$ and $112^{\circ} 6' 47''$, and their declinations $45^{\circ} 46' 15''$ and $5^{\circ} 45' 3''$, both N. 10
 4. Given the obliquity of the Ecliptic $23^{\circ} 27' 42''$, and the right ascension of the sun $10^{\circ} 39' 40''$: to find the sun's longitude, declination, and angle of position. 10
- Total. 88

NORMAL CLASS.—Mathematical Questions.

Analytical Geometry.

१. $2y = 3x + y$ या रेषेशीं 8° अंश कोन करी अशी दुसरी एक रेष origin मधून जात्ये आहे तिचें समीकरण काय होईल ते सांग.
२. डिनोस्त्रेटस् याची क्वाड्राट्रिक्स (Quadratrix of Dinostratus.) हीचे समीकरणांत जेव्हां $x = a$ तेव्हां $y = \frac{2a}{\pi}$ होत्येहें सिद्ध कर.
३. दीर्घवर्तुळास स्पर्श करणाऱ्या अशा दोन रेषा एकमेकांस लंब आहेत त्यांचे locus पासून कोणती आकृती उत्पन्न होईल.
४. $y^3 = x^3 + ax^2$ या वक्राकृतीचा asymptote, आडव्या प्रदर्श रेषेस कोठें कापील व तिशीं किती कोन करील तें सांग.
५. जर एका भरिवाचें पृष्ठफळ दाखवायास s घेतला तर $\frac{ds}{dx} = 2$ ग y . $\frac{ds}{dx}$ हें सिद्ध कर.
६. Cycloid या आकृतीचे स्पर्शरेषेचें समीकरण काय तें सांग.

७. कोन आणि त्रिज्या ही दिली आहेत या पासून कोणतेही spiral वरील स्पर्शरेषेवरचा लंबाचें मान काढण्याचें. Or $\frac{1}{p^2} = u^2 + du^2$ जांत $u = \frac{1}{r}$.

Astronomy.

८. पृथ्वी सूर्या सभोंवतीं जो मार्ग क्रमिती तो मार्ग दीर्घवर्तुळाकृती आहे हें सिद्ध कर.

९. ज्या पुंजांत सूर्य नाही त्या पुंजांत ग्रहाची अंशिक गति सम-मान आहे असें म्हणावयास चिंता नाही इतकेंच की केंद्रच्युती फार थोडी असावी.

APPENDIX C.

SPECIMENS OF ESSAYS AND ANSWERING.

SENIOR CLASS.

English Essay.

Subject.—"The Influence of the Invention of Printing on the Diffusion of Knowledge."

This is a wonderful age for directing and instructing. There are books for all ages, sexes, sizes, sorts, and conditions ; books of instruction for all, and of hints to everybody: Everything is reduced to art and science ; to rules and method : whether you want to make a pudding or your will ; to buy a horse or dance a polka ; to educate your son or cultivate your field—you have only to go to your bookseller's, find what book or books have been written expressly on the subject, and you are unlucky indeed if you do not find your case provided for even to a nicety, your difficulties precisely foreseen, and the road you have to travel as clearly laid down as a course on an Admiralty chart. But, strange to say, the attention of man is soon engrossed with those sordid and mean objects which he meets with while moving in the dusty paths of life, and thus he neglects his high interests. It is the duty of every philanthropist to place these interests before man under various aspects, by changing the dress and position, so as to give them fresh grace and more powerful attractions. Now, the subject in hand is one whose effects on the diffusion of knowledge have been vast, and which is much written upon ; and I am not ashamed to say, that though it does not transcend my ability, yet I cannot do more than those bright intellects who have spent their time and thoughts in elucidating the subject, and in exhibiting it in strong and vivid colours.

The influence of the invention of printing, that is, the effects produced by the invention of that art of copying, which saves time and labour, on the diffusion of knowledge, are vast and gigantic.

The cause of looking into this subject is obvious ; for that duty which teaches us to look to one benefactor with gratitude, and to view with pleasure the effects of his beneficence, teaches us also to look to the great benefactor of the human race—the inventor of the art of printing—with the same feeling, and to find out what influence the art has shed on the diffusion of knowledge—a thing, if the term be allowed, that gives us *power*, and teaches us to make a right use of it.

The art of printing was not known to the ancients. It was invented in the fifteenth century, by a citizen of Haarlem. The story of the invention runs thus :—One day, while amusing himself in his garden, he cut into the bark of a tree letters composing his own name. He pressed on them the end of his coat, and was greatly amused to find the cloth receive the impression. He made some improvement in this art. The honour of the invention of this art is due to Holland ; but other countries were not behindhand in contributing to the rapid growth of this art. Books, the medium of conveying thoughts in written language, were very dear in ancient times, and in confirmation of this, you will find it reported of some Queen, that she gave some scores of sheep in exchange of a written copy of the Bible. Examples are not wanting to prove the paucity and dearne[ss] of books in ancient times ; but time does not allow me to bring a great number of them. If you but turn over the pages of ancient history, a host of them will appear before you.

The effects produced by this art, as said before, are vast and gigantic. By this art wonders have been effected. The paucity of books, which was greatly felt in ancient times, had been done away with by the happy rise of this art. Through books we read the thoughts of those who have shone and are shining in the literary worlds of this as well as the other parts of the globe, and who have been called ‘the nobility of nature.’ The getting up newspapers greatly owes to this art. What would have been the use of getting up a newspaper when the art

of printing was unknown? Thousands of persons would have been occupied with the copying a newspaper which had the least circulation. What are we to say, then, speaking of "*The Times*," and other such newspapers, which have a wide circulation? The office which the newspapers perform is that of a servant running to all quarters to collect information, and appearing before his master at a stated hour. Thus, when a person subscribes to different newspapers, he has so many servants going in different directions, to collect whatever news they can come at. Thus the person gets a knowledge, by reading the papers, of what is going on in the world around him. The office which books perform is that of a store, where everybody that wishes may resort, and take as much as he can; but he cannot deprive others of what he has taken. Through books we read the thoughts of the "nobility of nature"—of those whom she has favoured with high intellectual powers. The art of printing has cheapened knowledge, by reducing the price of books; and by this means has left in the power of those who wish to buy, and who would not have been able before the invention, books—companions amid the flirtations of joy, as well as the depressions of sorrow; with whom, if we cannot agree, we shall never come to words. The art of printing has, as if, made both the rich and the poor eligible to the pursuit of knowledge if they but desire. Every science owes little or more to this art. A man in one part of the globe invents something, and another situated quite at the other extremity of the globe makes some improvement on it. Now, if the second person had not heard anything of the invention, he would not have been able to make any improvement on it; and thus every art and science would not have received so rapid fluxes of improvement as have brought them to their present state. This art has filled up the desideratum which was desired for a long time. In ancient time, what the philosophers did put forward was available to those only who attended their lectures; but in these days, if, in England for instance, some member of parliament delivers a speech, or some professor delivers a lecture, we, who are situated in another part of the world, at the distance of hundreds of miles, soon learn, even to a syllable, what he said. All this we owe to the art of printing, and the want of

this art in ancient times has kept us so much in ignorance of the manners, the customs, the literature, and the institutions of the ancients.

ATMARAM PANT PATKAR.

JUNIOR CLASS.

Paper on History.

1. Henry possessed, by the right of his father, Anjou and Tourain ; by the right of his mother, Normandy and Maine ; and by the right of his wife, Poictou, Guienne, Auvergne, and a few other minor provinces. Henry afterwards added Brittany to his dominions. Henry, who was now in England, was recalled to Normandy by the intrigues of his brother Geoffrey, who laid claims to Anjou and Maine. But the presence of Henry overawed the malcontents, who submitted to him. His brother Geoffrey went to Nantes, the inhabitants of which deposed their Count, Hoel, and gave that country into the hands of Geoffrey. But Geoffrey soon after dying, Henry laid claims to Nantes, by the right of primogeniture. But he did not get possession of that country peaceably. Conan, the Earl or Duke of Brittany, soon after the death of Geoffrey, got possession of Nantes, which, he said, had belonged once to his territories ; so Henry was obliged to lead an army to defend his right. Lest Lewis the King of France should give assistance to the Earl of Brittany, Henry went over to Paris, and engaged the French King on his side, by promising him to give his eldest son Henry in marriage to Margaret, daughter of Lewis. Henry, after thus preventing the French King from giving any assistance to the Earl of Brittany, went over with his army to Nantes. The Earl, in despair of success, made submissions to Henry, made peace with him, and gave his daughter in marriage to Geoffrey, the king's third son, though both were of very tender ages. But the Earl died seven years after the peace was made, and as he left no issue except his daughter, whom he had betrothed to Henry's son in marriage, became the rightful heir to all his dominions, and Henry, as the *mesne* lord, became her guardian ; and so Henry at present got the dominion of Brittany into his hands in so easy a manner.

2. The natives of Europe, on the accession of Henry II., were not bound to each other ; no common cause excited the warlike spirits of these nations, excepting the Crusades ; commerce did not bind one nation to another, as it now does ; and every king was so much engaged in quelling the quarrels of his own barons and their rebellions, that he never entertained a thought of invading the neighbouring countries. The chief disputes which were now going on were between the Emperor of Germany and the Pope on one side of Europe, and between the Kings of England and France on the other ; while the other nations as if were fallen in sound lethargy.

In France, the French King had little or no authority over his subjects. The French barons, who were of a very independent spirit, taking advantage of the weakness of their prince, pushed their authority to such a height that they left very little for their sovereign. The king dare not oppose any of his barons, for no sooner did he take any violent efforts against him, than all the French nobility were in arms against him, to defend the cause of their fellow man. Though Lewis the Gross was one time able to muster a force of 200,000 men, to lead them to his frontiers against the Germans, still, at another time, a petty lord of Puiset or Couci was able to give him defiance.

In England, however, the case was different. The king's dominions were not restricted ; he had the sole authority over his barons, whom he can always keep in control. His revenues were great, and he was therefore able to levy an army whenever he chose ; and from the tenor of the history of the reign of any English King, it will be seen that this all holds true.

Now, by comparing the powers of the French and English Kings, it will be clearly seen that the power of the latter prevailed over that of the former, and, moreover, the accession of a prince like Henry II. brought new powers to the English crown.

3. King Henry II. from the beginning of his reign intended to restrict the usurpations of the clergy, but he did not take any violent measures against them in the lifetime of Theobald, the primate, to whose fidelity he owed his throne. But after his death he began with his operations ; he appointed Thomas á

Becket, his chancellor, to that office, from whom he thought he would not receive any opposition. But no sooner was Becket appointed in this office, than he became one of the greatest enemies of the king. Becket gave refuge to a clerk, who had seduced the daughter of a gentleman, and who was now going to kill him. Henry required Becket to give that clerk up to the magistrate, that he might be duly punished ; but Becket refused, and sent an answer that he shall be punished only by degradation. * The king, taking this as a pretext, held a council of barons and prelates, in which he asked the latter whether they were willing to adhere to the old laws and customs of the realm or not ? They all answered in the affirmative, except Becket ; but he also was at last persuaded to consent. But the king, knowing that these prelates would throw off this yoke whenever they would find an opportunity, thought of defining expressly those terms of which he required compliance. For this reason he held a council at Clarendon of barons and prelates, in which the following laws, commonly called the *Constitutions of Clarendon*, were passed :—

That clerks accused of any crime should be tried in the civil court. That any appeals in the episcopal court should be carried by the archdeacon to the bishop, from the bishop to the primate, and from the primate to the king, and should be carried no farther. That no clergyman shall be allowed to leave the kingdom without the king's consent. That if any clergy holds lands belonging to the royal demesnes, he should do homage to the king for those possessions, as the laics do. That the sons of villains shall not be ordained clerks, without the consent of their lords. No chief tenant of the crown should be excommunicated, or his lands laid under an interdict, without the king's consent. That the primate may attend general assemblies, even if he is not summoned.

4. The Pope at those times had the authority even of disposing of kingdoms. This is clearly shown when Pope Adrian III. empowered Henry II. to conquer Ireland. The reason urged by the Pope on this occasion was, that by that means the Irish, who had not embraced Christianity, might be converted to that

religion, and that by so doing their souls might be saved from eternal damnation. Henry, being thus empowered, now waited for a favourable opportunity, which happened soon after. Dermot, Macmorrough, King of Leinster, carried off Dovergilda, the wife of the Prince of Breeffuy, who had confined her in an island surrounded by bog. The prince, resenting this act of gallantry, invaded the dominions of Dermot in conjunction with O'Connar, King of Ireland. Dermot was defeated, and was obliged to take shelter: he went over to Guienne, where King Henry then resided, and asked the assistance of that prince in restoring him to his dominions. But Henry was not then able to give any assistance to him, because he was engaged in the controversy with the prelates; but he gave Dermot letters patent, by which he empowered any of his subjects to give assistance to him if they liked. Dermot took these letters to England, and wandered there for some time, before he found any one ready to assist him. At last he engaged Richard, surnamed Strongbow, Earl of Strigul, on his side, by promising him to give his daughter Eva in marriage to him. While Richard was making preparations to levy an army, Dermot went over to Wales, and there engaging FitzStephen and FitzWilliam, two noblemen in those parts, on his side, retired to Ireland, and took shelter in the monastery of Fernes, which was built by him. FitzStephen came over with an army first; afterwards he was joined by FitzWilliam; and at last Richard Strongbow came over with a greater army, and joined the two former. The conjoined forces defeated the Irish in every encounter, and at last made Dermot the King of Ireland. Dermot, however, did not long survive his good fortune; he dying soon after the conquest, left his dominions to his son-in-law Richard Strongbow, his son being killed by O'Connar while he remained in his hands as a hostage given by Dermot. King Henry, hearing of the fortune attending his subjects, came over to Ireland, and settled everything there: he made Richard Seneschal of Ireland, and returned to France. King Henry, knowing that the conquest of Ireland will not be permanently maintained if his English and French subjects did not go and colonize in Ireland, persuaded them to do so; but the barrenness of that soil, and other circumstances,

so little invited foreigners to that country, that very few migrated to Ireland. For this reason Ireland was not completely subdued until the end of the reign of Queen Elizabeth.

5. On the death of Hubert, Archbishop of Canterbury, the minor prelates appointed Reginald privately, and instructed him to go to the Pope, and without letting anybody know his designs, and receive from his hands the ensigns of that office. But Reginald, when he reached the borders of Germany, opened his designs to all. The English, hearing of this, recalled Reginald; and the King entreated his subjects to appoint the Bishop of Norwich in that office. The people consenting to John, sent the Bishop of Norwich to Rome, to receive the ensigns. The party of Reginald also sent him to the Pope. So before the Pope now lay a dispute between the two parties; but the Pope, without giving any heed to the causes of both, appointed Langton in the office of primate. Lest the English King should get enraged at this open injustice of the Church, the Pope sent for him four rings, and assigned to each some particular qualities.

DORABJI PADAMJI.

FRESHMAN CLASS.

Paper on Belles-Lettres.

Criticism is the application of true taste and good sense to several fine arts : it is employed for judging the beauties and faults of composition. It aims at chiefly to ascend from particular instances to general principles : true taste, founded upon a natural and instinctive sensibility to beauty, and a sound sense, are for its foundation.

Before I show the uses of criticism, I explain first what those two words Delicacy and Correctness of taste signify. A man of delicate taste possesses nicer organs and powers, by which he discerns those beauties which lie hidden from the vulgar eye. A man of correct taste is one who is never imposed on by counterfeit beauties, but is always guided by sound principles of reasoning. Exquisite delicacy and thorough correctness undoubtedly imply each other. But they are often distinguishable. The

former is more the child of nature, the latter of refinement and culture ; one leans more to feeling, the other more to reason and judgment. Here is a wide field for the exercise of criticism. As true criticism consists in finding faults and discerning beauties in a composition, it will assist us much in appreciating genuine beauties, and setting at defiance those false beauties which dazzle vulgar and ignorant people.

Genius is a power of executing, taste is a power of judging. Genius supposes taste in the highest degree, and also the possession of those natural powers which it is impossible for man to create—it is the gift of nature ; while taste is a power of receiving pleasures from the beauties of nature and of art, and of judging whether these pleasures are just or unjust. Taste, however, in its perfect state, is the product of natural sensibility to beauty, and improved understanding.

The fundamental quality of style is perspicuity. It is not a negative virtue or freedom from defect—on the contrary, it is a positive beauty to composition. A writer, who writes in a clear and perspicuous language, not only relieves from embarrassment, but pleases the reader. This quality respects chiefly two things—the choice of words, and the proper collocation them. It has three degrees—purity, propriety, and precision. The two former words are indiscriminately employed by most of the English authors. The difference, however, can be clearly pointed out between them. Purity is the use of such words and phrases as belong to the idiom of the language, in opposition to foreign, obsolete, or new-coined words. Propriety is the selection of such words and construction, as the best and the most established usage has appropriated to those ideas which we intend to express by them. The standard to which these may be referred, is the practice of the best writers and speakers in the country.

Custom refers to the action, habit to the actor. Custom signifies the frequent repetition of the same act ; habit signifies the effect produced by the mind or body. One, by the custom of walking in the streets, often acquires the habit of idleness.

Pride is the high opinion which we entertain of ourselves. Vanity is a desire of receiving estimation of others. A person may be too proud to be vain.

Wisdom leads a man to adopt proper means of accomplishing an object. Prudence implies the means that prevent him from falling into danger. A wise man employs proper means for success. A prudent man employs means in order to avoid being brought into danger.

Difficulty embarrasses, while obstacle stops us. We remove the one, while we surmount the other. The former arises from the nature of a thing, the latter from a foreign cause.

Invention is the act of finding out things that have not existed before. Discovery is the act of finding out things which did exist before, but were unknown. Galileo invented the telescope; Columbus discovered America.

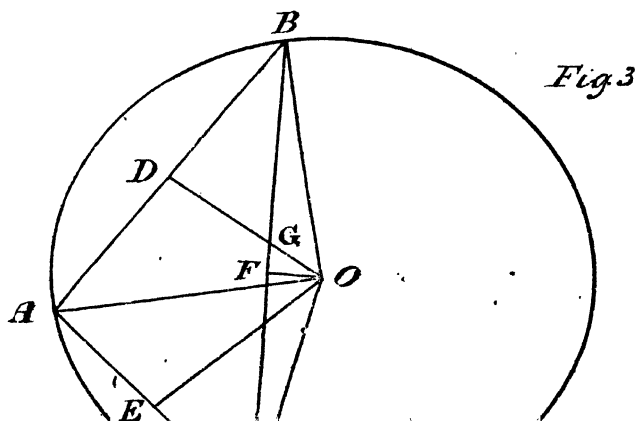
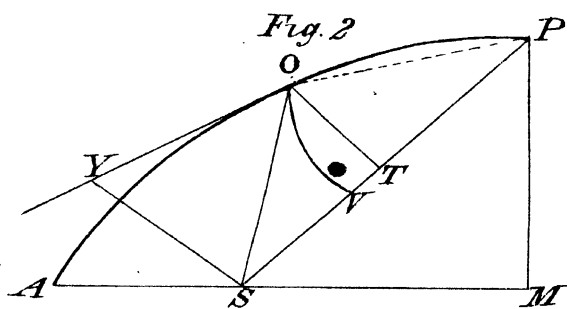
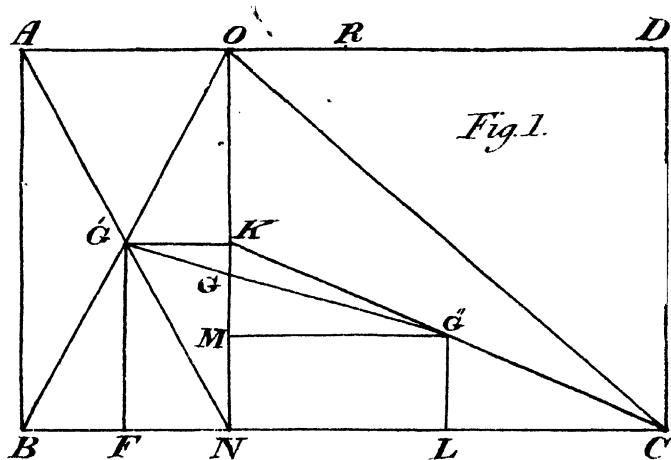
It is unquestionably true, that in the beginning of society men communicated their thoughts by means of gestures and cries, or what are called by the grammarians interjections; but as men increased in number, and became acquainted with more things every day, the gestures and cries, the elements of language, were found inadequate, so the necessity brought words into use. The names which men invented were given first to those objects which struck their ideas most, then to the agent, and then to the action performed.

In dry style, the author is contented with giving his meaning clearly to others; he aspires not in the least to ornament. This kind of style is at all to be avoided, except in didactic compositions, and even here with a sparing hand.

The plain writer gives his meaning in a clear and perspicuous language, and hunts not after tropes and figures. The difference between a dry and a plain writer is, that the former is incapable of ornaments, and does not seem to know them; while the latter seeks not after them.

Neat style rises one degree higher above the plain, in point of ornament, but that ornament is not of the highest or most sparkling kind. The attention of the writer is especially directed to the choice of words, and the graceful arrangement of them, rather than to the poetical effusion.

Elegant style rises still higher above plain or neat style. The ornament employed here is of a higher kind—neither excessive nor degrading. This style every one should imitate;



here the ornament is of the most sparkling kind, without any fault.

When the ornaments employed are too rich and gaudy in proportion to the nature of the subject, that style is called florid or flowery. This kind of style is allowable in young writers to a certain extent, when they are given to wonder and astonishment, and influenced by their imagination and passions.

RAWJI GODBOLE.

SENIOR CLASS.

Paper on Statics.

From a given rectangle, A B C D, of uniform thickness, to cut off a triangle C D O, so that the remainder, A B C O, when suspended at O, shall hang with A B in a vertical position. (See Fig. 1.) Draw O N parallel to A B; draw the diagonals A N and B O; and from G', where the two diagonals cut one another, draw G' K perpendicular to O N. According to a previous proposition, $G G' : G G'' :: \triangle O N C : \square A B N O$. The two triangles G K G' and G M G'' are similar, $\therefore G G' : G G'' :: G' K : M G''$. But G' K and M G'' are respectively equal to F N and N L; therefore, substituting these values, $G G' : G G'' :: F N : N L$. The two triangles O B N and O N C have the same altitude, and are between the same parallels; $\therefore B N : N C :: \triangle O B N : \triangle O N C$. By alternation, $B N : \triangle O B N :: N C : \triangle O N C$. Multiplying the first by 2, we get $2 B N : 2 \triangle O B N :: N C : \triangle O N C$; $N C : 2 B N :: \triangle O N C : \square A B N O$. But $N C : 2 B N :: F N : N L$; $\therefore F N : N L :: N C : 2 B N$. But F N is $\frac{1}{2}$ of B N, and N L $\frac{1}{3}$ of N C; $\therefore \frac{1}{2} B N : \frac{1}{3} N C :: N C : 2 B N$, or $B N^2 = \frac{1}{3} N C^2$, or $A O^2 = \frac{1}{3} O D^2$, or $3 A O^2 = O D^2$. Bisect A D in R. Let A R = a, and O R = x; therefore $(a + x) = O D$, $(a + x)^2 = O D^2$, and $(a - x)^2 = A O^2$; $\therefore 3 (a - x)^2 = 3 A O^2$; $\therefore 3 (a - x)^2 = (a + x)^2$. Expanding $3 a^2 - 6 a x + 3 x^2 = a^2 + 2 a x + x^2$. By transposition, and changing signs, $2 x^2 - 8 a x = -2 a^2$. Dividing both sides by 2, $x^2 - 4 a x = -a^2$; $x^2 - 4 a x + 4 a^2 = -a^2 + 4 a^2 = 3 a^2$; $x - 2 a = \sqrt{3 a^2} = a \sqrt{3}$; $\therefore x = 2 a + a \sqrt{3} = a (2 + \sqrt{3})$.

PURSHOTAM NARAYAN BHAT.

Dynamics.

If Q be the area of any curve, whose polar co-ordinates are r and θ , then prove that $dQ = \frac{r^2 d\theta}{2}$.

Let Q be the area of ASQ , and P any point in the curve: describe the arch QV , from Q as a centre, and draw QT perpendicular on SP , and join PQ . (See Fig. 2.)

Now let SP be equal to r , and $\angle ASQ = \theta$.

Area of the triangle $SQP = \frac{SP \cdot QT}{2}$. But $\triangle SQP = SQT$ ultimately, therefore $\triangle SQP = dQ$, and ultimately $SP = SQ$; but $SQ = r$, $\therefore SP = r$. In the same manner, $QT = r d\theta$. Substituting these values in the above equation for the area of the triangle SQP , we get $dQ = \frac{r^2 d\theta}{2}$.

PROP. II.—Demonstrate, that the area described by the radius vectre of any orbit is proportioned to the time of its description.

SP is the radius vectre; let the centre of force be the origin of the rectangular ordinate, and also Y the pole of the polar co-ordinates, and $SM = X$, $PM = Y$, $\angle ASP = \theta$, and $SP = r$; and also let the force acting along PS at P be called f , and also let the components SM and PM be called x and y . Now $f : X :: SP : x$, $\therefore X = \frac{f}{r} \cdot x$.

Also $f : Y :: r : y$, $\therefore Y = \frac{f}{r} y$.

But we know, from uniformly accelerating motion, that $X = \frac{d^2 x}{dt^2}$, and $Y = \frac{d^2 y}{dt^2}$; but in this case $X = -\frac{d^2 x}{dt^2}$ and $Y = -\frac{d^2 y}{dt^2}$;

Therefore $\frac{f}{r} x = -\frac{d^2 x}{dt^2}$, and $\frac{f}{r} \cdot y = -\frac{d^2 y}{dt^2}$

Multiplying the first equation by y , we get $-\frac{y d^2 x}{dt^2} = \frac{fxy}{r}$

Multiplying the second equation by x , we get $-\frac{x d^2 y}{d t^2} = \frac{f x y}{r}$

$$\therefore \frac{y d^2 x}{d t^2} = \frac{x d^2 y}{d t^2} ; \text{ or } \frac{y d^2 x - x d^2 y}{d t^2} = 0.$$

But $y d^2 x - x d^2 y = d (y dx - x dy) ;$ therefore
 $d \left(\frac{y dx - x dy}{d t^2} \right) = 0.$

Now by integration $\frac{y dx - x dy}{d t} = h$ constant.

$PM = SP \cdot \sin ASP$ or $y = r \cdot \sin \theta$, and $SM = -SP \cdot \cos \theta$, or $x = -r \cdot \cos \theta$. By differentiating the first equation,
 $dy = dr \cdot \sin \theta + \cos \theta \cdot r \cdot d\theta$. Multiply by x , $x dy = -dr \cdot d\theta \cdot r \cdot \sin \theta \cdot \cos \theta - r^2 \cdot d\theta \cdot \cos^2 \theta$ (a)

Differentiate the second equation.

$dx = -dr \cdot \cos \theta + \sin \theta \cdot r \cdot d\theta$. Multiply by y ,
 $y dx = -dr \cdot d\theta \cdot r \cdot \sin \theta \cdot \cos \theta + r^2 d\theta \sin^2 \theta$ (b)

Subtract (a) from (b).

$$\begin{aligned} y dx - x dy &= r^2 d\theta \cdot \cos^2 \theta + r^2 d\theta \sin^2 \theta. \\ &= r^2 d\theta (\cos^2 \theta + \sin^2 \theta). \\ &= r^2 \cdot d\theta. \end{aligned}$$

Therefore $\frac{r^2 d\theta}{d t^2} = h$ constant.

KRISHNAJI HARI RAHALKAR.

Paper on Mathematics.

(1). Two chords, AB and AC, of a circle, represent two forces; one of them, AB, is given : find the position of the other when the resultant is a maximum. (Sec Fig. 3.)

Draw OD perpendicular to AB, OE perpendicular to AC, and OF perpendicular to BC; join O · B, and O · C.

Call the angle BOA 2θ , and $\angle AOC$ $2\theta'$; then the $\angle BOD$ will be equal to θ , and $\angle AOE$ θ' . Let AB = a , and AC = x .

The two triangles FOG and DBG are similar; \therefore angle FOG = $\angle ABC$; but angle ABC = $\frac{1}{2} \angle AOC$, and angle AOE is also = $\frac{1}{2} \angle AOC$; therefore angle ABC =

$\angle AOE$. But angle ABC is proved $= \angle FOG$, therefore angle $FOG = \theta'$; therefore the angle $BOF = (\theta + \theta')$.

$$\sin \theta = \frac{n}{2r}, \text{ and } \sin \theta' = \frac{x}{2r}. \text{ Also}$$

$$\begin{aligned} \cos \theta &= \sqrt{1 - \sin^2 \theta} = \sqrt{1 - \frac{a^2}{4r^2}}, \text{ and } \cos \theta' \\ &= \sqrt{1 - \frac{x^2}{4r^2}} \end{aligned}$$

$$\frac{BF}{r} = \sin BOF = \sin (\theta + \theta'). \text{ Multiply by } 2r.$$

$$\therefore 2BF = 2r \cdot \sin (\theta + \theta') = 2r (\sin \theta \cdot \cos \theta' + \sin \theta' \cdot \cos \theta).$$

$$BC = 2r \cdot \sin \theta \cos \theta' + 2r \sin \theta' \cos \theta.$$

By substitution we get,

$$\begin{aligned} &= 2r \frac{a}{2r} \cdot \sqrt{1 - \frac{x^2}{4r^2}} + 2r \frac{x}{2r} \sqrt{1 - \frac{a^2}{4r^2}} \\ &= a \cdot \left(1 - \frac{x^2}{4r^2}\right)^{\frac{1}{2}} + x \left(1 - \frac{a^2}{4r^2}\right)^{\frac{1}{2}} = \text{maximum.} \end{aligned}$$

Now, by differentiating this expression, we get,

$$\begin{aligned} \frac{d\eta}{dx} &= \frac{1}{2} a \left(1 - \frac{x^2}{4r^2}\right)^{-\frac{1}{2}} \cdot \left(-\frac{2x \cdot 4r^2}{16r^4}\right) + \left(1 - \frac{a^2}{4r^2}\right)^{\frac{1}{2}} \\ &= 0. \end{aligned}$$

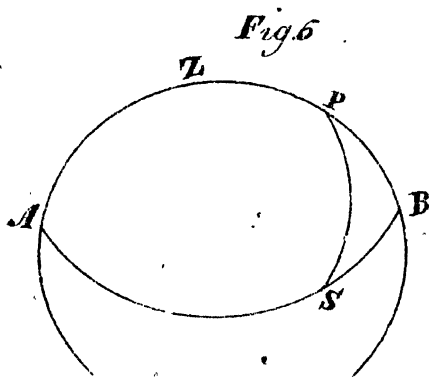
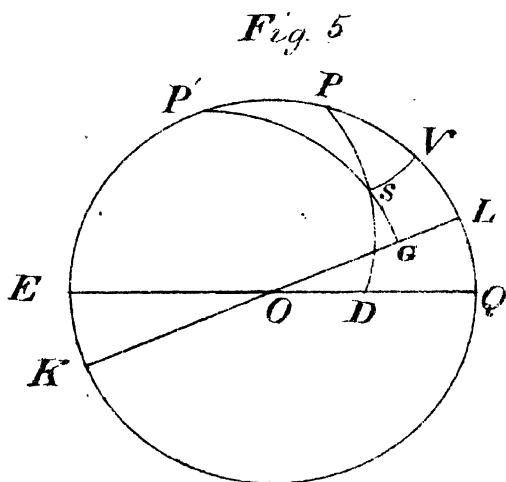
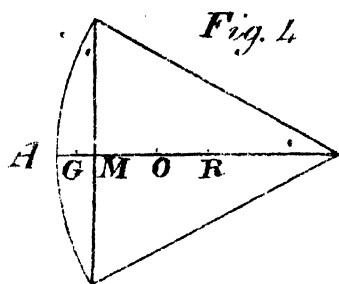
$$= -\frac{ax}{4r^2} \cdot \left(1 - \frac{x^2}{4r^2}\right)^{-\frac{1}{2}} + \left(1 - \frac{a^2}{4r^2}\right)^{\frac{1}{2}} = 0.$$

By transposition,

$$\left(\frac{\frac{ax}{4r^2}}{\left(1 - \frac{x^2}{4r^2}\right)^{\frac{1}{2}}}\right)^{\frac{1}{2}} = \left(\frac{4r^2 - a^2}{4r^2}\right)^{\frac{1}{2}}. \text{ Square both the sides.}$$

$$\frac{\frac{a^2 x^2}{16r^4}}{\frac{4r^2 - x^2}{4r^2}} = \frac{4r^2 - a^2}{4r^2}. \text{ Or,}$$

$$\frac{a^2 x^2}{4r^2 + (4r^2 - x^2)} = \frac{4r^2 - a^2}{4r^2}. \text{ Multiply by } 4r^2.$$



$$\frac{a^2 x^2}{4 r^2 - x^2} = 4 r^2 - a^2. \quad \text{Or,}$$

$$a^2 x^2 = 16 r^4 - 4 r^2 a^2 - 4 r^2 x^2 + a^2 x^2. \quad \text{Therefore}$$

$$4 r^2 x^2 + 4 r^2 a^2 = 16 r^4. \quad \text{Divide by } 4 r^2.$$

$$x^2 + a^2 = 4 r^2 = \text{square of the diameter.}$$

Therefore a makes with x an angle of 90° .

(2). To find the centre of gravity of a spheric sector.

G is the centre of gravity of spheric segment.

O ditto of spheric sector.

R ditto of cone. (See Fig. 4.)

Let A M, the versed sine, = x .

$$\text{Solidity of segment} = \frac{\pi}{6} (6 r - 2 x) x^2 = \frac{\pi}{3} (3 r - x) x^2.$$

$$\text{Solidity of sector} = \frac{\pi}{3} (2 r^2 x) = \frac{2}{3} \pi r^2 x.$$

$$\text{Solidity of cone} = \frac{\pi}{3} (r - x) (2 r x - x^2) = \frac{\pi}{3} (2 r^2 x - 3 r x^2 + x^3).$$

Find A G.

$$X = \frac{\int y^2 x dx}{\int y^2 dx}. \quad \text{But } y^2 = (2 r x - x^2); \text{ therefore}$$

by substitution,

$$= \frac{\int x \cdot (2 r x - x^2) \cdot dx}{\int (2 r x - x^2) \cdot dx} = \frac{\int 2 r x^2 \cdot dx - x^3 \cdot dx}{\int 2 r x \cdot dx - x^2 \cdot dx} = \frac{\frac{2 r x^3}{3} - \frac{x^4}{4}}{r x^2 - \frac{x^3}{3}}$$

Multiply the numerator and denominator by 12.

$$= \frac{8 r x^3 - 3 x^4}{12 r x^2 - 4 x^3}. \quad \text{Dividing by } x^2 \text{ we get,}$$

$$X = A G = \frac{8 r x - 3 x^2}{12 r - 4 x}.$$

$$\text{Distance of G from base of cone} = x - \frac{8 r x - 3 x^2}{12 r - 4 x} =$$

$$\frac{4 r x - x^2}{12 r - 4 x} = G M.$$

Distance of R from base of segment = $\frac{1}{4} (r - x) = \text{R M.}$

$$\text{Therefore } \text{G R} = \frac{1}{4} (r - x) + \frac{4 r x - x^2}{12 r - 4 x} = \frac{r - x}{4} + \frac{4 r x - x^2}{12 r - 4 x}.$$

$$= \frac{12 r^2 - 4 x r - 12 r x + 4 x^2 + 16 r x - 4 x^2}{48 r - 16 x} = \frac{12 r^2}{48 r - 16 x}.$$

$$= \frac{3 r^2}{12 r - 4 x} \cdot \text{But,}$$

Solidity of sector : solidity of cone :: G R : G O ; or

$$\frac{2 \pi}{3} r^2 x : \frac{\pi}{3} (2 r^2 x - 3 r x^2 + x^3) :: \frac{3 r^2}{12 r - 4 x} : \text{G O.}$$

Therefore,

$$\text{G O} = \frac{\frac{\pi}{3} (2 r^2 x - 3 r x^2 + x^3) \left(\frac{3 r^2}{12 r - 4 x} \right)}{\frac{2 \pi}{3} r^2 x} =$$

$$\frac{\frac{2 r^2 x \pi - 3 r x^2 \pi + \pi x^3}{3} \times \frac{3 r^2}{12 r - 4 x}}{\frac{2 \pi r^2 x}{3}}.$$

$$\text{G O} = \frac{\frac{6 r^4 x \pi - 9 r^3 x^2 \pi + 3 r^2 \pi x^3}{12 r - 4 x}}{2 \pi r^2 x}$$

$$= \frac{6 r^4 x \pi - 9 r^3 x^2 \pi + 3 r^2 \pi x^3}{24 \pi r^3 x - 8 \pi r^2 x^2} \cdot \text{Divide the numera-}$$

tor and denominator by $\pi r^2 x$.

$$= \frac{6 r^2 - 9 r x + 3 x^2}{24 r - 8 x}$$

But A O = A G + G O.

$$= \frac{8 r x - 3 x^2}{12 r - 4 x} + \frac{6 r^2 - 9 r x + 3 x^2}{24 r - 8 x} \cdot \text{Or,}$$

$$= \frac{16 r x - 6 x^2}{24 r - 8 x} + \frac{6 r^2 - 9 r x + 3 x^2}{24 r - 8 x}$$

$$A O = \frac{6r^2 + 7rx - 3x^2}{24r - 8x} = \frac{(2r + 3x) \cdot (3r - x)}{8 \cdot (3r - x)}$$

Therefore $A O = \frac{2r + 3x}{8}$

DORABJI PADAMJI.

JUNIOR CLASS.

Analytical Plane Trigonometry.

Determine A, from the equation

$$1 + 2 \sin 4 A = 4 \sin 3 A \cdot \cos A.$$

$$1 + 4 \sin 2 A \cdot \cos 2 A = 4 \sin (2 A + A) \cdot \cos A.$$

$$1 + 4 (2 \sin A \cdot \cos A) \cdot (1 - 2 \sin^2 A) = 4 (\sin 2 A \cdot \cos A + \cos 2 A \cdot \sin A) \times \cos A.$$

$$1 + 4 (2 \sin A \cdot \cos A - 4 \sin^3 A) \cdot \cos A = 4 (2 \sin A \cdot \cos A + \sin A - 2 \sin^3 A) \cos A.$$

$$1 + 8 \sin A \cdot \cos A - 16 \sin^3 A \cdot \cos A = 4 (2 \sin A (1 - \sin^2 A) + \sin A - 2 \sin^3 A) \cdot \cos A.$$

$$= 4 (2 \sin A - 2 \sin^3 A + \sin A - 2 \sin^3 A) \cdot \cos A.$$

$$= 4 (3 \sin A - 4 \sin^3 A) \cdot \cos A.$$

$$= 12 \sin A \cdot \cos A - 11 \sin^3 A \cdot \cos A.$$

$$1 + 8 \sin A \cdot \cos A = 12 \sin A \cdot \cos A.$$

$$\therefore 4 \sin A \cdot \cos A = 1. \quad \text{Dividing by 2 we get,}$$

$$2 \sin A \cdot \cos A = \frac{1}{2}.$$

$$\text{Or } \sin 2 A = \frac{1}{2}.$$

$$\therefore 2 A = 30^\circ.$$

$$A = 15^\circ.$$

Given, $1 - \sin a = 2 \sin^2 \left(x - \frac{a}{2} \right)$ find x .

$$1 - \sin a = 2 \sin^2 \left(x - \frac{a}{2} \right)$$

$$\frac{1 - \sin a}{2} = \sin^2 \left(x - \frac{a}{2} \right)$$

$$\frac{1 - \sin a}{2} = \left(\sin x \cdot \cos \frac{a}{2} - \cos x \cdot \sin \frac{a}{2} \right)^2$$

$$= \sin^2 x \cdot \cos^2 \frac{a}{2} - 2 \sin x \cdot \cos x \cdot \sin \frac{a}{2} \cos \frac{a}{2} + \cos^2 x \cdot \sin^2 \frac{a}{2}$$

$$\begin{aligned}
 & \sin^2 x \left(1 - \sin^2 \frac{a}{2} \right) - \frac{\sin^2 x \cdot \sin a}{2} + (1 - \sin^2 x) \sin^2 \frac{a}{2} \\
 & \frac{1 + \sin^2 x \cdot \sin a - \sin a - \sin^2 x - \sin^2 x \cdot \sin^2 \frac{a}{2} + \sin^2 \frac{a}{2}}{2} \\
 & \frac{a}{2} - \sin^2 x \cdot \sin^2 \frac{a}{2} \\
 & = \sin^2 x - 2 \sin^2 x \cdot \sin^2 \frac{a}{2} + \sin^2 \frac{a}{2} \\
 & = \sin^2 x \left(1 - 2 \sin^2 \frac{a}{2} \right) + \sin^2 \frac{a}{2} \\
 & = \sin^2 x \cdot \cos a + \sin^2 \frac{a}{2} \\
 & 1 + \sin 2x \cdot \sin a - \sin a = 2 \sin^2 x \cdot \cos a + 2 \sin^2 \frac{a}{2}
 \end{aligned}$$

By transposing—

$$2 \sin^2 x \cdot \cos a - \sin^2 x \sin a = 1 - 2 \sin^2 \frac{a}{2} - \sin a.$$

$$2 \sin^2 x \cdot \cos a - 2 \sin x \cdot \cos x \cdot \sin a = \cos a - \sin a.$$

$$2 \sin x (\sin x \cdot \cos a - \cos x \sin a) = \cos a - \sin a.$$

$$2 \sin x \cdot \sin (x - a) = \cos a - \sin a.$$

$$\sin (x - a) = \frac{\cos a - \sin a}{2 \sin x}$$

$$\text{Or, } \sin \left(x - \frac{a}{2} \right) = \frac{\cos \frac{a}{2} - \sin \frac{a}{2}}{2 \sin x}$$

$$2 \sin^2 \left(x - \frac{a}{2} \right) = \frac{\cos^2 \frac{a}{2} - 2 \sin \frac{a}{2} \cos \frac{a}{2} + \sin^2 \frac{a}{2}}{2 \sin^2 x}$$

$$\text{But } 2 \sin^2 \left(x - \frac{a}{2} \right) = 1 - \sin a.$$

$$\therefore 1 - \sin a = \frac{1 - \sin^2 \frac{a}{2} - \sin a + \sin^2 \frac{a}{2}}{2 \sin^2 x}$$

$$\therefore 2 \sin^2 x = \frac{1 - \sin a}{1 - \sin a} = 1.$$

$$\sin^2 x = \frac{1}{2}.$$

$$\sin x = \frac{1}{\sqrt{2}}$$

$$\therefore x = 45^\circ.$$

Astronomical Problems.

1. The right ascension of the star Aldebaran is $67^{\circ} 40'$, and its declination $16^{\circ} 8' \text{ N.}$; it is required to find the latitude and longitude.

Let EQ be the equator; KL the ecliptic; and S the star Aldebaran; draw SV perpendicular on PQ . (See Fig. 5.)

$OD = \text{right ascension,} = 67^{\circ} 40'.$

$SD = \text{declination,} = 16^{\circ} 8'.$

$LQ = PP' = \text{obliquity,} = 23^{\circ} 28'.$

$\therefore QD = 90^{\circ} - R.A. = 22^{\circ} 20'$; and $SP = 90^{\circ} - \text{dec.} = 73^{\circ} 52'.$

Then, in the right-angled triangle SPV we have,

$$R \cdot \cos SPV = \cot SP \cdot \tan PV.$$

$$\therefore \tan PV = \frac{R \cos SPV}{\cot SP} = 10 + 9.9661365 - 9.4612967 \\ = 10.5048398.$$

$\therefore PV = 72^{\circ} 38'.$ But $P'V = P'P + PV = 96^{\circ} 6'.$

$$\sin SV = \frac{\sin SPV \cdot \sin SP}{R} = 9.5797772 + 9.9825506 - \\ 10 = 9.5623278.$$

$\therefore SV = 21^{\circ} 21'.$

$$\cos P'S = \frac{\cos P'V \cdot \cos SV}{R} = 9.0263865 + 9.9689757 - \\ 10 = 8.9953622.$$

$\therefore P'S = 81^{\circ} 20'$; $\therefore \text{lat. of } S = 5^{\circ} 40'.$

Again, in the right-angled triangle $SP'V$ we have,

$$\sin P'V = \frac{\tan SV \cdot \cot SP'V}{R}; \text{ therefore,}$$

$$\cot SP'V = \frac{R \cdot \sin P'V}{\tan SV} = 10 + 9.9975340 - 9.5931705 \\ = 10.4043635.$$

$\therefore SP'V = 21^{\circ} 31'$; $\therefore \text{long. of } S = 68^{\circ} 29'.$

2. To a place having north latitude $52^{\circ} 12' 35''$, when does the sun rise and set, and what are its rising and setting azimuths the sun's declination being $16^{\circ} 0' 46''.$

Let A Z P be the meridian, in which Z is the zenith, and P the pole, and A S B the horizon. (See Fig. 6.)

P B = the latitude of the place, = $52^{\circ} 12' 35''$.

P S = 90° — the sun's declination = $90^{\circ} - 16^{\circ} 0' 46'' = 73^{\circ} 59' 14''$.

S P B = the hour angle, and S B = the azimuth.

Then, in the right-angled triangle S P B, we have,

$$\cos S P B = \frac{\tan P B \cdot \cot S P}{R} = 10 \cdot 1103177 + 9 \cdot 4579730 - 10 = 9 \cdot 5682907.$$

\therefore hour angle = $111^{\circ} 43'$. But 15° make an hour, therefore $111^{\circ} 43'$ make 7h. 26m. 52s.; therefore 7h. 26m. 52s. is the time of the rising and setting of the sun.

$$\sin S B = \frac{\sin S P \cdot \sin S P B}{R} = 9 \cdot 9828054 + 9 \cdot 9680274 - 10 = 9 \cdot 9508328'.$$

\therefore azimuth = $63^{\circ} 15'$.

NOWROJI PADAMJI.

COLLEGE DIVISION.

Vernacular Essay.

स्त्रीशिक्षण व त्यापासून लाभ.

सृष्टिकर्त्याने स्त्रीपुरुषांस उत्पन्न केलें, आणि त्यांच्या शरीर व मानसिक शक्ति तत्तद्रचनेनुरूप त्यांच्या अंगी दिल्या. ह्या प्रमाणें कीं स्त्री फार सुकुमार व नाजूक आहे त्या प्रमाणें तिच्या अंगी तसलीच नाजूक कामें करण्याची शक्ति ठेविली आहे; तसेंच पुरुषाच्या शरीर व मानसिक रचने प्रमाणें त्यांच्या अंगी फार श्रमाची कामें करण्याची शक्ति ठेविली आहे. आतां आपण असा विचार करूं कीं स्त्रिया विद्याशिक्षणार्ह आहेत किंवा नाहींत म्हणजे त्यांस विद्या शिकवूं लागलों तर त्यांस ती येईल किंवा नाहीं, आणि जर त्या विद्याशिक्षणार्ह असल्या तर विद्या शिक्षणापासून त्यांस, त्यांच्या नवऱ्यांस, त्यांच्या मुलांस, आणि त्यांच्या जवळच्या लोकांस काय फायदे होतील. स्त्रियांच्या शरीर व मानसिक रचने वरून पाहिलें असतां व इतिहासांमध्ये विद्या-

चारसंपन्न लोकांमध्ये स्त्रिया विद्वान् व सदाचरणी अशा आढळतात, ह्या वरून पाहिलें असतां असें दिसतें कीं स्त्रियांस विद्या शिक्षितां येईल. विद्या शिक्षणापासून मुख्य लाभ हे आहेत कीं सृष्टपदार्थांच्या ज्ञानानें व त्यांच्या संयोगवियोगापासून जीं भिन्न २ कार्ये होतात त्यांच्या ज्ञानानें ह्या संसारामध्ये सृष्टपदार्थांपासून होणारीं सुखें जीं दुरवाप्य आहेत तीं अल्पायासानें व अल्प कालामध्ये संपादन कनितां येतात. दुसरा. नाना प्रकारचीं नीतिबोधक पुस्तकें शिकल्यापासून व तीं पुस्तकें स्वतः वाचून समजण्याची आपल्या अंगीं योग्यता आली म्हणजे जर आपण तीं पुस्तकें वाचलीं तर आपण व सृष्टिकर्ता ह्यांच्यामध्ये संबंध कोणता, आपण ईश्वराशीं कोणत्या रीतीनें वागावें, सृष्टिकर्त्यानें हे जे आपले बंधुजन उत्पन्न केले आहेत त्यांमध्ये आणि आपणामध्ये संबंध कोणता व त्यांच्याशीं आपण कोणत्या रीतीनें वागावें, ऐहिक सुखापेक्षां अनंतपट जास्ता व चिरस्थायी असें जें पारमार्थिक सुख तें आहे किंवा नाहीं आणि जर असलें तर तें संपादन करण्याचे मार्ग कोणते ; हें सर्व ज्ञान झालें असतां जें सुख प्राप्त होतें त्या सर्वांस विद्या कारण होय. बुद्धि, स्मृति, धारणा-शक्ति इत्यादिक मानसिक शक्तींच्या उद्गावनें करून जो आनंद होतो त्यास ही विद्याच कारण होय. पृथ्वी वरील बहुतेक देशांमध्ये तेथील लोक आपल्या स्त्रियांस दासी सारख्या वागवून मोठमोठाले धंदे व उद्योग करून सुखें आपणच भोगतात, ह्याचें कारण मलय असें दिसतें कीं प्रत्येक मनुष्यास असें वाटत असतें कीं आपण स्वतंत्र असावें, आपण दुसऱ्यावर अम्मल व जुलूम करावा आणि दुसऱ्यांनीं निमूटपणीं आपल्या अधिकाराखालीं राहावें आणि आपला जुलूम सोसावा. अशी म्हण आहे कीं बळी तो कान पिळी, ह्या प्रमाणें पुरुषानें आपल्या बलाच्या साहाय्यानें स्त्रीस दासी करून ठेविलें. हें लिहिण्याचें कारण इतकेंच कीं जर आपण असें म्हटलें कीं स्त्रियांनीं स्वतः उपयोग करून विद्येचें संपादन करावें, तर हें करणें स्त्रियांस परमाशक्य आहे. हें मी उदाहरणांनें स्पष्ट करितों. एक पदार्थ आहे तो कोणत्या रीतीचा व त्याची रुचि काय हें जर आपणास ठाऊक नाहीं परंतु काहींकांस ठाऊक आहे

तर त्यांच्या वांचून तो पादार्थ मिळवावा म्हणून आपणास इच्छा तरी कशी होईल आणि इच्छा नसल्यामुळे तो पादार्थ मिळविण्याचे उपाय कसे समजतील? ह्या प्रमाणे विद्या म्हणजे काय आणि तीपासून लाभ जे होतात ते पुरुषाच्या साहाय्यावांचून स्त्रीस कळणें अशक्य आहे. जसजसे पुरुष विद्वान् होतील आणि ईश्वराच्या दृष्टीनें सर्व प्राणी सारखे आहेत असें वाटून आपण जीं सुखें भोगितों तीं आपल्या स्थितीं ही मिळावीं असें त्यांस जसजसे कळत जाईल तसतसे स्त्रियांचे विद्या शिक्षणाचे उपाय जास्ती वाढले असें म्हटलें तरी बाध नाही. ह्या करितां स्त्रियांस विद्या शिकवावी आणि तेणेंकरून त्या ज्ञानी कराव्या असा उद्देश सिद्धास नेणें असल्यास प्रथमतः पुरुषाची विद्या वाढण्याचे जे उपाय ते वृद्धिंगत झाले पाहिजेत, आणि त्यांच्या मनांतील मत्सर, आपणासच स्वातंत्र्य असावें ही इच्छा, स्वार्थ दृष्टि इत्यादिक जे दुष्ट मनोविकार ते जाऊन परहितेच्छादिक ज्या सदासना त्या त्यांच्या मनांत जसजश्या येऊं लागतील त्या प्रमाणें स्त्रियांस विद्या शिकविण्यार्थ जे प्रतिबंध आहेत ते कमी झाले म्हणून समजावें. स्त्रियांस विद्या शिकविली असतां पुढें त्यांस जीं मुलें होतील तींही सुशिक्षित आणि सदाचरणी अशीं होतील. मुलास उत्पन्न झाल्यापासून सात आठ वर्षे पर्यंत आई वांचून कोणी माहित नसतें. तर त्या वर्षांमध्ये आईने मुलास सदाचारकर्म सदाचरणाच्या गोष्टींनीं जर त्या बालकाचें मन रमविलें आणि अशा सदाचरणारानें अन्य बालकांच्या मनावर काय परिणाम झाले असतील ते व त्यापासून त्यां बालकांस व त्यांच्या मातापितरांस किती सुख झालें असेल हें जर तिनें आपल्या मुलास सांगितलें तर त्या मुलाची पुढें सदाचरण व विद्या ह्याविषयीं जगतांत कीर्ति होईलच. स्त्रिया विद्वान् झाल्या असतां त्यांच्या नवऱ्यांस जे फायदे होतात ते फार उघड आहेत आणि ते पुष्कळांनीं स्पष्ट करून दाखविले आहेत म्हणून त्याचें मी येथें विवरण करित नाही. कोणत्याही गोष्टीचें ज्ञान झालें असतां बहुधा तीन फलें उत्पन्न होतात. पहिलें हें कीं ती गोष्ट समजल्या पासून आपणास केवळ आनंद होतो ते. दुसरें, त्या गोष्टीच्या ज्ञानापासून व्यव-

हारांत उपयोग झाल्यामुळे इहलोकीं सुख होतें. तिसरें, आपल्या आचरणानुरूप परलोकीं आपणांस सुख किंवा दुःख प्राप्त होईल हें ज्ञान ह्या गोष्टीपासून झाल्यामुळे सदाचरणाकडे आपलें मन वळणें, हीं तीन फलें स्त्रियांस विद्या शिखविली असतां त्यांस व त्यांच्या जवळच्यांस प्राप्त होतात. ह्या हिंदु लोकांमध्ये इतक्या दिवस पर्यंत गर्वामुळे व दुराग्रहामुळे ज्या वास्तविक ज्ञानानें युरोप खंडांतील मोठमोठाले इंग्लंड, फ्रांस, इत्यादिक देश अशा महत्त्वास येऊन पोहोचले त्या ज्ञानाचा विद्याचारसंपन्न जे इंग्लिश लोक त्यांच्या संबंधानें उत्तरोत्तर हिंदुस्थानांत प्रसार होत चालला आहे हें मोठ्या भरभरीचें चिन्ह आहे.

रावजी गोडबोले.

SANSKRIT DEPARTMENT.

Sanskrit Essay (in Verse).

स्त्रीशिक्षणविषये.

स्त्रीभिर्गणनविद्यादौ कर्तव्या ऽ भ्यासआदरात् ॥ निष्प्रत्यवायेविषये प्रत्यवायधिषेहयत् ॥ १ ॥ निषिद्धयतेप्रवृत्तिस्त युक्तिगूयंतुमन्महे ॥ धर्मशास्त्रनिषिद्धत्वा युक्तत्वाद्बहुभिर्गुणैः ॥ २ ॥ तथाहि ॥ लौकिकोहिजनस्वामिद्रव्यस्यापजिघृक्षया ॥ आश्रित्यस्वामिनंकंचित् संदेशहरभूमिकः ॥ ३ ॥ धान्यादिकंसमादाय समर्घगृहमागतः ॥ ब्रूतेमहर्घमितिहि तदेयमुपयुज्यते ॥ ४ ॥ किंच ॥ प्रयोजनमिहोद्दिश्य किंचिद्देशांतरंगतः ॥ ज्ञापनायस्वकंवृत्तं पत्रिकांप्रेषयेत्यतिः ॥ ५ ॥ गोप्यंवृत्ततदन्यद्वा जानीयुरितरान्विना ॥ विवेकहीनाश्वकथं कुर्वतेद्रव्यसंग्रहं ॥ ६ ॥ अयमर्थस्तुसर्वेषा मानुभाविक एवाहि ॥ किंच ॥ अनभिज्ञा कथंपत्यु रिंगितज्ञाभविष्यति ॥ ७ ॥ तदाकुर्यान्मनोमोदं भर्तुराज्ञानुवर्तिनी ॥ विनीतधिषणाभ्युश्चे द्विद्याभ्यासात्कुलस्त्रियः ॥ ८ ॥ तस्मान्मनीषाकौशल्य हेतुर्विद्येतिशुश्रुम ॥ एवंबहुगुणोत्कर्षे निषेधोयुक्तिवर्जितः ॥ ९ ॥ कृतप्रज्ञाहिसततं पातिव्रत्यमतंद्रिताः ॥ रक्षंति सदसज्ञान सहायःपापभीरवः ॥ १० ॥ धर्मशास्त्रानिषिद्धेषु विद्याभ्यासेषु यत्नतः ॥ श्रमःकार्यो ऽ त्रसंदेहो नकश्चिदिहविद्यते ॥ ११ ॥

पाठशालास्थ विद्यार्थी रेषाचार्य.

APPENDIX D.

VARIOUS RETURNS.

Table of Stipendiary, Paying, and Free Students in the Poona College, on the 31st December 1854.

No.	Department.	Stipendiary.	Paying.	Free Students, in each Department.	Total Number in each Department.	Average Attendance.
1	Sanscrit Department	..	7	107	124	100
2	English Department	..	106	185	328	289
3	Normal Department	..	..	9	36	34

3 are vacant.

Table of Castes of Students of the Poona College.

Brāhman.	Shenvi.	Kasta.	Sutar.	Sonar.	Parbhu.	Shedra.	Khatritya.	European, Portuguese, &c.	Parsi.	Wani.	Pardeshi.	Musalman.	Taliang and Kongdi.	Tambut.
437	2	1	2	3	16	12	1	3	4	1	1	1	1	3

Return of Students in the College and School Divisions of the English Department, on 31st December 1854.

COLLEGE DIVISION.	Senior Class, under the Principal	33
	Junior Class, under ditto	44
	Normal Class, under ditto	17
	Senior Class, under the Professor of English Literature	6
	Junior Class, under ditto	9
	Freshman Class, under ditto	20
	Senior Class, under the Professor of Mathematics	7
	Junior Class, under ditto	7
	Freshman Class, under ditto	29
SCHOOL DIVISION		287

Names of the Students that left the Normal Class in 1854.

Names of Students.	Place to which sent.	Pay.	Date of leaving the College.	Remarks.
Ganu Parázpe ..	Karád ..	30	March 1854.	
Tátya Birwádkar.	Sáwant Wádí..	35	May 1854.	
Rámá Pátankar ..	Dhárwár ..	20	June 1854.	
Wyankat Bába A- ●chárya ..	Batis Shírole..	20	July 1854.	
Sakháram Rishí..	Wái ..	30	August 1854.	
Páandu Rede ..	Yavale ..	20	September 1854.	
Gopál Shástrí ..	Ahmednaggar.	20	Ditto.	
Shivrám Khare ..	Chákan ..	12	October 1854.	
Rámá Bháwe ..	Phaltan ..	20	Ditto.	
Naráyan Sapre ..	Vinchur ..	20	November 1854.	
Naráyan Shástrí Sáthe ..	Málwán..	15	Ditto.	
Bhikam Bhat ..	Karád ..	12	December 1854..	
Sadú Maráthe ..	.....	..	.....	Resigned.
Bálu Bhat Wái- kar ..	.....	..	.....	Ditto.

APPENDIX No. XXX.

ANNUAL REPORT

OF THE

GRANT MEDICAL COLLEGE,

FOR THE SESSION 1854-55.

ANNUAL REPORT
OF THE
GRANT MEDICAL COLLEGE,
BOMBAY.

NINTH YEAR.—SESSION 1854-55.

Bombay:
PRINTED AT THE
BOMBAY EDUCATION SOCIETY'S PRESS.

1855:

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ANNUAL REPORT

OF THE

GRANT MEDICAL COLLEGE,

BOMBAY.

NINTH YEAR.—SESSION 1854-55.

ESTABLISHMENT OF PROFESSORS DURING THE SESSION.

<i>Principal, and Professor of Medicine</i>	C. MOREHEAD, M.D. (Absent on sick certificate.)
<i>Acting ditto</i>	J. PEET, Esq.
<i>Professor of Chemistry and Botany</i>	H. GIRAUD, M.D.
<i>Professor of Midwifery</i>	W. C. COLES, M.D.
<i>Professor of Surgery</i>	J. PEET, Esq. (Acting Principal and Professor of Medicine.)
<i>Acting ditto</i>	G. R. BALLINGALL, M.D.
<i>Professor of Anatomy and Physiology, and Curator of the Museum</i>	G. R. BALLINGALL, M.D. (Acting Professor of Surgery.)
<i>Acting ditto</i>	J. H. SYLVESTER, Esq.
<i>Professor of Medical Jurisprudence</i>	W. CAMPBELL, M.D.
<i>Professor of Materia Medica.</i>	R. HAINES, M.B.
<i>Professor of Ophthalmic Surgery.</i>	H. J. CARTER, Esq.

1. THE Ninth Session of the College was opened on the 15th of June 1854. The
Opening of the Session. Introductory Address was delivered by the Acting Principal.

2. In former Reports, the desirability of increasing the number of Professorships, with the view of bringing the College under the regulations of the examining bodies of Great Britain, was much dwelt upon. The necessary sanction to effect this object was received from the Honorable the Court of Directors, just before the commencement of the Session. The arrangement of some of the Professorships has in consequence required modification. The chairs of Anatomy and Surgery, and of Chemistry and Materia Medica, have been separated, and one of Ophthalmic Surgery instituted. This separation has led to an increase in the number of lectures upon those subjects, and to a more extended course of instruction in Botany, Practical Toxicology, and Operative Surgery.

In carrying out the arrangements just noticed, Dr. Ballingall, the Curator of the Museum, has been appointed Professor of Anatomy and Physiology; Mr. Haines, who formerly officiated in the absence of Dr. Giraud, of Materia Medica; and Mr. Carter, the Acting Oculist, of Ophthalmic Surgery.

3. Mr. Peele having resigned his appointment of Professor of Midwifery, Dr. Coles, the Professor of Medical Jurisprudence, was nominated his successor, and the vacant chair of Medical Jurisprudence was filled by Dr. Campbell.

Dr. Morehead, the Principal of the College, left Bombay for Europe, on sick certificate, at the end of May. The Professor of Surgery, Mr. Peet, was appointed to act as Principal, and in the chair of Medicine; being succeeded in that of Surgery by Dr. Ballingall. Mr. J. H. Sylvester was appointed to act as Professor of Anatomy and Physiology, and Curator of the Museum.

4. During the course of the Session, arrangements have

Amalgamation of the appointments of Medical Store-keeper and Professor of Materia Medica.

been made by Government for the amalgamation of the appointments of Medical Store-keeper and Professor of Materia

Medica; in consequence of which Mr. Impey temporarily succeeds to the latter office, and the connection of Mr. Haines with the College will, to the regret of his colleagues, cease.

5. At the close of April 1854, twenty-four Candidates

Admission of Students.

for admission into the College were examined; of these eleven were found qualified.

6. Twenty-nine Students, thirty-one Student-Apprentices, eleven Warrant Officers

Number of Pupils.

and Hospital Assistants—in all

seventy-one pupils, have attended for instruction during the Session.

7. Since the date of the last Report, an important step

Recognition of the College by the Royal College of Surgeons of England.

in the advancement of Native Medical Education has been effected, in the recognition of the College, by the Royal Col-

lege of Surgeons of England, as one of its affiliated Schools for Medical Instruction. Further information upon this subject will be found in Appendix Z.

8. In consequence of the separation of the chairs, no-

Lectures.

ticed in the 2nd paragraph, the courses of lectures upon some

of the subjects have been extended.

9. The Acting Professor of Anatomy and Physiology,

Anatomy and Physiology.

Mr. Sylvester, reports that the course of Anatomy and Physio-

logy comprised 142 lectures: 12 of these treated of the proximate principles and the minute anatomy of the tissues, the remainder were devoted to Descriptive Anatomy and Physiology. The physiological division of the course has, so far as it has gone, been given with much minuteness; but it is anticipated, that in future Sessions it will be more comprehensive and complete.

10. Dr. Giraud, the Professor of Chemistry, states that
Chemistry. the chemical lectures, and the instructions in Practical Chemistry in the laboratory, have been conducted in all respects as in the preceding Session.

11. Botany, of which Dr. Giraud is also the Professor,
Botany. has, however, been more fully treated than in former Sessions; as will be seen by the following memorandum, with which Dr. Giraud has favoured me:—"Hitherto, a limited number of botanical lectures have been delivered by the Professor of Materia Medica, in connection with that subject. This year, a separate and systematic course of Botany has been introduced into the College curriculum, and has been attended by the 2nd and 3rd Year Students. Two lectures were delivered, and one examination held, each week, from the 15th June till the 31st October; in all 36 lectures, the heads of which will be found in Appendix Q."

12. Instructions in Practical Toxicology were given
Practical Toxicology. once a week, from 1st November till 28th February, by the Professor of Chemistry, in the laboratory, to the 4th and 5th Year Students, and to the 3rd Year Student-Apprentices.

13. Dr. Ballingall, the Acting Professor of Surgery,
Surgery. reports that the course of Surgery consisted of 90 lectures,

which, deducting the 4 formerly devoted to Ophthalmic Surgery, is an increase of 22 lectures. *The original syllabus was pretty closely followed, but many of the subjects, and particularly that of inflammation, and its pathological results, were more fully discussed, than in previous years.

14. During the first half of the Session, two hours were weekly employed in the dissecting-room, in practising the most important operations on the dead body. In Appendix K will be found a list of the chief operations performed by each senior Student.

Operative Surgery.

15. One lecture on Clinical Surgery was given weekly, the Hospital affording abundant opportunity for this important study.

Clinical Surgery.

I have had much pleasure in witnessing the interest shown by the Students during the Session in the acquirement of dexterity in the performance of surgical operations. This has been mainly due to the able and zealous manner in which they have been superintended by the Professor of Surgery, coupled, perhaps, with a stimulus given to the prosecution of this part of Surgery, by the successful performance by Dr. Ballingall of an unusual number of difficult operations in the Jamsetjee Jejeebhoy Hospital.

16. The course of Medicine has been conducted as nearly as possible in the manner detailed in former Reports. 108 lectures have been given, besides a weekly Clinical lecture ; and examinations, both written and oral, have been periodically held.

Medicine.

17. Clinical Instruction in the Hospital continues to receive the same careful attention as in former Sessions, and

Clinical Instruction.

has been conducted entirely upon the principles, and in the manner, so fully detailed in the Report for 1852-53.

18. The course of Medical Jurisprudence, Dr. Campbell reports, has consisted of 63 lectures, and the usual weekly examinations.

Medical Jurisprudence.

Instead of 4, as in previous years, 6 lectures were given on Insanity, and the better to become familiarised with the characters and symptoms of mental disorder, the Students paid two visits to the Lunatic Asylum at Colaba, where a couple of hours on each occasion were devoted to Clinical instruction in the subject. With this, and one or two other unimportant exceptions, the course has been conducted in close accordance with the printed syllabus of the former Professor.

19. Upon the subject of Materia Medica, 74 lectures were given, and 36 examinations held. Mr. Haines states, that

Materia Medica.

the order in which the subjects have been treated is the same as in former years; but from the transference of the lectures on Botany to a distinct course, opportunity has been afforded of entering, somewhat more fully than before, into many of the details of the subject, particularly into the therapeutic applications of the articles of the Materia Medica. The natural history of the vegetable drugs has been more concisely treated, the botanical lectures affording a much more connected and efficient means of illustrating it. After the conclusion of the course, two supplementary lectures were given on diet and regimen as therapeutic means, but there was not time to complete the subject, nor to enter upon the consideration of other important agents, as electricity, friction, blood-letting, acupuncture, &c.

20. The lectures and examinations upon Midwifery, and

*Midwifery, and Diseases
of Women and Children.*

the 'Diseases of Women and Children, have been given in accordance with the prospectus of the College. 65 lectures were delivered, and 30 examinations held. Dr. Coles states :—"The only change from former years consisted in the diseases of 'the unimpregnated state' receiving a larger share of attention, whilst those of 'children' were not so fully gone into. This mode of dealing with two subjects, associated with, but subordinate to Midwifery, seemed desirable in a class attending lectures upon Midwifery, and diseases of Women and Children, for two consecutive Sessions. The Students have had, during the Session, an opportunity of watching the progress of some cases of Natural Labour in the Obstetric Institution ; of witnessing the performance of several important operations in Midwifery ; and of attending at the Female Dispensary." An abstract of admissions, &c. into the Sir Jamssetjee Jejeebhoy Obstetric Institution, forms Appendix L.

21. Mr. Carter has favoured me with the following

Ophthalmic Surgery. Report of the Class of Ophthalmic Surgery :—

"The course of Ophthalmic Surgery consisted of 26 lectures, and 20 examinations, during which the anatomy of the eye and its appendages was minutely described, and its physiology, so far as this relates to the understanding, and treatment of ophthalmic affections.

"Inflammation specially, and then generally, as regards the entire organ, was fully considered, and its treatment, together with wounds of the eye and their treatment. The inflammatory affections of the superficial structures, and of the deep-seated or internal structures, were severally described, and accompanied by their treatment respectively.

The morbid affections of the lids, and the malignant diseases of the eye, were described, with their treatment; and successively those of the retina and optic media. Lastly, the diseases of the lachrymal apparatus, and their treatment, were described.

“All the operations which are chiefly preferred for remedying morbid alterations in the lids, and external parts of the eye, as well as those which are performed on the iris and lens, for the restoration of sight, were detailed; and the course, generally, illustrated by diagrams, so far as the resources of the College would admit.”

22. It will thus be seen, that the number of lectures upon each subject, and the arrangement of the several courses, are nearly in accordance with the curriculum forwarded to the College of Surgeons, and which will be found in Appendix Z.

23. Six Students presented themselves for “First *First Certificate Examination* Examination Certificates”; of these, four were found qualified, viz:—

Hormusjee Bazunjee.

A. D’Souza.

Cursetjee Framjee.

Bazunjee Rustomjee.

24. The final examination was conducted by Dr. Don (the *Diploma Examination* Govt. Examiner), Mr. Stovell, Dr. Arbuckle, and Mr. Mead.

Three Candidates presented themselves for examination, viz. Mr. M. A. Misquitta, Hormusjee Bazunjee, and Rustomjee Merwanjee. They were all found qualified.

25. Scholarships have been awarded to Cursetjee Framjee, Burjorjee Ardascer, Mr. A. *Award of Scholarships.* M. Continho, Bazunjee Rus-

tomjee, Cowasjee Nowrojee, Jumnnadas Hurgovindas, Eduljee Nesserwanjee, Manockjee Aderjee, and Ramchundra Narrayen.

26. The Sir Jamsetjee Jejeebhoy Medical Prize was awarded by the Government
Sir Jamsetjee Jejeebhoy Examiner to Mr. M. A. Mis-
Prize. quitta.

27. Five Warrant Officers have been examined. To
Warrant Medical Officers. four of these the Certificate of
 Qualification for promotion to
 the grade of Apothecary has been granted, viz. to Mr.
 Pollard, Mr. Almeida, Mr. Panton, and Mr. Carpenter.

28. Five Student-Apprentices have been examined for
Student-Apprentices. Certificates of Qualification ;
 of these two were successful,
 viz. H. Washington, and S. Cavanagh.

It will be my pleasing duty to bring to the notice of the Medical Board the very satisfactory appearance made by these young men, in all the subjects in which they were examined.

A less pleasing duty, however, will devolve upon me, of reporting to the same authority, that the conduct of the Student-Apprentices attached to the Jamsetjee Jejeebhoy Hospital has not, during the Session, been characterized by that propriety and regularity which young men in their position should feel a pride in exhibiting. There are, indeed, many amongst them, whose propriety of demeanour and attention to their studies have been very praiseworthy ; but at the same time, I do not think *they* have always shown that interest in restraining their younger fellow Apprentices from the commission of acts of imprudence which, from their age and respectability, might have been anticipated.

29. The Burnes Medal, presented by the Masonic Brethren of Bombay, has been awarded to H. Washington.

30. The Willoughby Prize, of Rs. 300, has been again offered for competition, but I am sorry to say no competitors have appeared.

I have reason to believe, that the absence of competitors for this prize has arisen from a misapprehension of the terms upon which it is to be awarded; and that under the explanation which has now been given, it will not be permitted to continue over the next year without competition.

31. The Sir Jamsetjee Jejeebhoy Obstetric Institution has, during the Session, been the means of affording relief in several cases of difficulty. The applicants for admission into that Institution, however, although more numerous than in preceding years, have been comparatively few in number.

32. Some valuable additions have been made to the Museum, consisting for the most part of a collection of wax models, prepared by Mr. Tomes, of Guy's Hospital, and forwarded by the Honorable Court of Directors. Preparations have been put by the Acting Curator, Mr. Sylvester, and contributions have been received from Medical Officers in different parts of the Presidency. Some progress has also been made in the formation of a Catalogue, and many of the specimens have been systematically numbered.

33. In the last Report, notice was taken of the advantage that would result to the departments of Materia Medica and Botany, by the well-arranged cultivation of a part of

the College compound. This suggestion was brought before Government by the Board of Education, but it was found that there were difficulties in the way of carrying out the object desired.

34. It is with much gratification that I am able to report that the Grant College Medical Society continues to be conducted, as heretofore, with spirit and success. Abstracts of some of the papers read before the Society have been deemed of sufficient value to receive a place in the "Transactions of the Medical and Physical Society of Bombay."

I regret, however, that the Vaccination Committee of the Society (the formation of which was noticed in the last Report) has not as yet achieved much good. The sanguine hope expressed by my predecessor, that "the Graduates of the College are so impressed with the importance of Vaccination to the welfare of their countrymen, that the difficulties which have arisen will serve merely to strengthen their energy, and quicken their zeal," will not, I think, be realized. On the contrary, I fear that the almost insuperable difficulties they have had to contend with have damped their ardour, and that a fresh stimulus to renewed exertion will be necessary before any great amount of good will be effected.

35. In consequence of the changes which became necessary upon the addition to the number of Professors, it was desirable that the College Regulations should be revised. This was effected with much care by my predecessor, just before his departure for Europe. The new Code, having received the sanction of the Board of Education, and of Government, is printed in Appendix AA.

36. In conclusion, I have much pleasure in expressing my thanks to my colleagues for their cordial co-operation in everything connected with the welfare of the Institution.

JOHN PEET,

Acting Principal, Grant Medical College.

Bombay, April, 1855.

APPENDICES

TO THE

ANNUAL REPORT OF THE GRANT MEDICAL COLLEGE.

NINTH YEAR.—SESSION 1854-55.

APPENDIX A.

List of Candidates for Admission as Students into the Grant Medical College; with the Result of the Examination held on the 28th April 1854, and 12th June 1854.

No.	NAMES.	Caste.	School where educated.	Qualified or not.	REMARKS.
1	Ramchundra Narrayen ..	Sonar	Free General Assembly's Institution	Qualified.	
2	Eduljee Nesserwanjee....	Parsee	Elphinstone Institution		
3	Jejeebhoy Bazunjee.....	Ditto	Ditto		
4	Anundrao Wasoodave....	Sonar	General Assembly's Institution		
5	Hurry Vishnool	Brahmin	Elphinstone Institution		
6	Burjorjee Framjee	Parsee	Ditto		
7	Pestonjee Muncherjee....	Ditto	Parsee Benevolent Institution.		
8.	Pestonjee Bomanjee	Ditto	Ditto		
9	Manockjee Aderjee.....	Ditto	Elphinstone Institution		
10	Pandoorung Moreshwar..	Brahmin	G. E. School, Rutnagherry..		
11.	Mr. J. R. Croker	European .....	.....	
12	Dhunjeebhoy Sorabjee ..	Parsee	Pestonjee Aderjee's School...		
13	Kishunram Jenabhoy....	Brahmin	Elphinstone Institution		
14	Baljee Crustnath.....	Purbhoo	Shreecrustna's School.....		

15	Ukerjee Sorabjee	Parsee	Elphinstone Institution	} Not Qualified.
16	Anundrao Crustnath	Pulsia	Genl. Assembly's Institution.	
17.	Ramcrustna Dinkur	Brahmin	Ditto ..	
18	Pestonjee Mexwanjee	Parsee	Elphinstone Institution	
19	Muccoond Juggonath ..	Shenvi	Genl. Assembly's Institution.	
20.	Moosakhan Ebrahim	Borah	Educated by Eduljee Nesser- wanjee	
21	Francis de Souza	Portuguese	Poona College	
22	Shunker Mahadew	Shenvi	Elphinstone Institution	
23	Dadabhoy Nesserwanjee ..	Parsee	Eduljee Nanabhoy's School...	
24	Jamsetjee Aderjee	Ditto	Elphinstone Institution	

JOHN PEET,

Acting Principal, Grant Medical College.

APPENDIX B.

List of Students in attendance in the Grant Medical College, during the Session 1854-55.

No.	NAMES.	Caste.	Age on Admission.	Native Town.	In what School educated.	Date of Admission.	REMARKS.
	<i>Free.</i>						
1	Henry Horne	Indo-Briton..	16	Bombay...	Mr. Boswell's School....	15th June 1850.	
2	Mr. J. R. Croker	European ..	33	Ditto ...	.....	15th June 1854.	Resigned.
3	Jejeebhoy Bazunjee	Parsee	18	Ditto ...	Elphinstone Institution ..	Ditto.	
4	Manockjee Aderjee	Ditto	18	Ditto ...	Ditto	Ditto.	
5	Pandoorung Moreswar ..	Brahmin	20	Chiploon ..	G. E. School, Rutnagherry	Ditto.	Resigned.
	<i>Stipendiary.</i>						
6	M. A. Misquitta	Portuguese ..	19	Bombay...	Elphinstone Institution ..	15th June 1850.	Now a Graduate.
7	Hormusjee Bazunjee	Parsee	18	Ditto ...	Ditto	Ditto.	Now a Graduate.
8	Rustonjee Merwanjee	Ditto	19	Ditto ...	Ditto	Ditto.	Now a Graduate.
9	Dheerajram Dulpuram ..	Kayast.....	19	Surat ...	Surat G. E. School	15th June 1851.	
10	Angelino de Souza	Portuguese ..	19	Bombay ...	Elphinstone Institution ..	Ditto.	
11	Antonio M. Continho	Ditto ..	19	Goa	Free Church Institution ..	Ditto.	

12	Cooverjee Dorabjee	Parsee	18	Bombay	Elphinstone Institution	Ditto.
13	Burjorjee Ardaseer	Ditto	16	Ditto	Ditto	Ditto.
14	Bazunjee Rustomjee	Ditto	18	Ditto	Ditto	15th June 1852.
15	Churesjee Framjee	Ditto	16	Ditto	Ditto	Ditto.
16	Covasjee Nowrojee	Ditto	19	Ditto	Parsee B. Institution	Ditto.
17	Junnadas Hurgovindas	Bunnia	18	Surat	Elphinstone Institution	15th June 1853.
18	Bhicajee Amroot	Brahmin	18	Ankloas	Poona College	Ditto.
19	Wamon Wasoodave Bhiday	Ditto	18	Poona	Ditto	Ditto.
20	Rustomjee Cowasjee	Parsee	21	Surat	Educated by Mr. Green	Ditto.
21	Sorabjee Jehangeerjee	Ditto	17	Ditto	Elphinstone Institution	Ditto.
22	A. P. D'Andrade	Portuguese	20	Goa	Free Church Institution	Ditto.
23	Ranchundra Narrayen	Sonar	17	Bombay	Free General Assembly's Institution	15th June 1854.
24	Eduljee Nesserwanjee	Parsee	17	Ditto	Elphinstone Institution	Ditto.
25	Anundrao Wasoodave	Sonar	17	Ditto	Genl. Assembly's Inst.	Ditto.
26	Hurry Vishnoo	Brahmin	17	Rutnagherry	Elphinstone Institution	Ditto.
27	Burjorjee Framjee	Parsee	17	Bombay	Ditto	Ditto.
28	Pestonjee Muncherjee	Ditto	18	Ditto	Parsee B. Institution	Ditto.
29	Pestonjee Bomanjee	Ditto	19	Surat	Ditto	Ditto.

Resigned.

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX C.

GRANT MEDICAL COLLEGE.

SESSION 1854-55.

SUMMER TERM.

From 15th June to 1st November.

LECTURES.

On Thursday the 15th June, the Introductory Lecture will be delivered by Mr. Peet, at 11 o'clock.

ANATOMY.		
<i>Mr. J. H. Sylvester</i>	{ Monday Wednesday .. Saturday }	at 1 P. M.

CHEMISTRY.		
<i>Dr. H. Giraud</i>	{ Tuesday Thursday }	at 12 o'clock.

PHYSIOLOGY.		
<i>Mr. J. H. Sylvester</i>	Tuesday	at 2 P. M.

MATERIA MEDICA.		
<i>Mr. R. Haines</i>	{ Monday Wednesday.... }	at 11 A. M.

BOTANY.		
<i>Dr. H. Giraud</i>	{ Monday	at 12 o'clock.
	{ Wednesday .. }	

PRINCIPLES AND PRACTICE OF MEDICINE.		
<i>Mr. J. Peet</i>	{ Monday	at 2 P. M.
	{ Wednesday .. }	
	{ Friday	

SURGERY.		
<i>Dr. G. Ballingall</i>	{ Tuesday Thursday Friday	at 1 P. M.

OPHTHALMIC SURGERY.		
<i>Mr. H. J. Carter</i>	Friday	at 11 A. M.*

MIDWIFERY.		
<i>Dr. W. C. Coles</i>	{ Monday	at 3 P. M.
	{ Wednesday.... }	

MEDICAL JURISPRUDENCE. { Tuesday } at 3 P. M.
Dr W. Campbell { Thursday }

CLINICAL SURGERY.

Dr. G. Ballingall Tuesday at 11 A. M.

CLINICAL MEDICINE.

Mr. J. Peet Thursday at 1 P. M.

PRACTICAL CHEMISTRY.

Dr H. Giraud Friday . . . from 11 to 1 o'clock.

OPERATIVE SURGERY. { Monday }

Dr. G. Ballingall { Thursday } at 12 o'clock.

HOSPITAL ATTENDANCE.

Clinical Medical Ward Daily, at 7 A. M.

Clinical Surgical Ward Do. at 8 A. M.

Clinical Midwifery Ward Do. at 4 P. M.

Dispensary Practice Do. at 8 A. M.

The 1st and 2nd Year Students will attend the Hospital daily at 7 A. M. in rotation, for periods of two months, and will be engaged in compounding and dispensing Medicine.

EXAMINATIONS.

ANATOMY	Friday, at 3 P. M.
CHEMISTRY	Saturday, at 11 A. M.
MATERIA MEDICA	Saturday, at 3 P. M.
BOTANY	Saturday, at 12 o'clock.
PHYSIOLOGY	Thursday, at 2 P. M.
SURGERY	Wednesday, at 12 o'clock.
OPHTHALMIC SURGERY	Saturday, at 11 A. M.
MEDICINE	Saturday, at 2 P. M.
MEDICAL JURISPRUDENCE	Saturday, at 3 P. M.
MIDWIFERY	Friday, at 3 P. M.

In addition to the regular Examinations by the Professors in *Anatomy* and *Physiology*, and *Materia Medica*, Examinations will be held in *Materia Medica* at 11 A. M., on Tuesdays and Thursdays; in *Anatomy* at 3 P. M., on Tuesdays, Thursdays, and Saturdays; and in *Physiology* at 3 P. M., on Mondays and Wednesdays.

During the hours when not engaged in the Lecture-room, the Students will be occupied in reading and note-taking in the Reading-room.

WINTER TERM.

From 1st November to 15th March.

The Lectures and Examinations will be on the same days and at the same hours as during the *Summer Term*, with the exception that there will not be any Lectures upon Ophthalmic Surgery and Botany, those subjects being finished in the *Summer Term*. Practical Toxicology will be taught in the Laboratory every Monday, from 11 to 1 o'clock.

PRACTICAL ANATOMY.

The Dissecting Season will be from the 1st November to the 15th March.

1. Each *Junior* Student will be expected to study, practically, during this period, under the superintendence of the Professor of Anatomy and his Assistant, the Anatomy of the Ligaments, Muscles, and the principal Blood-vessels and Nerves.

2. Each *Senior* Student who has not passed the First Certificate Examination will, in like manner, be expected to examine *fully and carefully*, the Anatomy of the Arteries, Nerves, Viscera, and the more important Surgical regions.

3. 4th, 5th, and 6th Year Students will be expected to study, under the superintendence of the Professor of Surgery, the various Surgical regions, and to connect with such examination the performance of Surgical operations.

4. To ensure a compliance with these Regulations, a Register will be regularly kept by the Professors of Anatomy and Surgery, according to a prescribed form. These Registers will be laid before the Examiners at the First Certificate and Final Examinations.

5. A Roll will be called in the Dissecting-room at 11, 2, and 4 o'clock.

6. During the Winter Season, the 2nd and 3rd Year Students will only attend those Examinations in Anatomy and Physiology which are held on Thursday and Friday.

ROLL-CALLS.

The College hours are from 10 A. M. to 4 P. M. A Roll-call

will take place before the commencement of each Lecture and Examination, as well as in the Clinical Wards.

From the 15th March to the 15th April, the Examinations will be held for Diplomas, Honours, and the Classification of the Students.

Order of the Lectures and Examinations during the Day.

	11 to 12 A. M.	12 to 1 P. M.	1 to 2 P. M.	2 to 3 P. M.	3 to 4 P. M.
MONDAY.	Materia Medica.	Botany. Operative Surgery.	Anatomy.	Medicine.	Midwifery. <i>Examination Physiology.</i>
TUESDAY.	Clinical Surgery. <i>Examination Materia Medica.</i>	Chemistry.	Surgery.	Physiology.	Medical Jurisprudence. <i>Examination Anatomy.</i>
WEDNESDAY	Materia Medica.	Botany. <i>Examination Surgery.</i>	Anatomy.	Medicine.	Midwifery. <i>Examination Physiology.</i>
THURSDAY.	Clinical Medicine <i>Examination Materia Medica.</i>	Chemistry. Operative Surgery.	Surgery.	Examination Physiology.	Medical Jurisprudence. <i>Examination Anatomy.</i>
FRIDAY.	Practical Chemistry. Ophthalmic Surgery.	Practical Chemistry.	Surgery.	Medicine.	Examination Anatomy. <i>Examination Midwifery.</i>
SATURDAY.	Examination Chemistry. Examination Ophthalmic Surgery.	Examination Botany.	Anatomy.	Examination Medicine.	Examination Medical Jurisprudence. Examination Materia Medica. <i>Examination Anatomy.</i>

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX D.

Abstract of Roll-calls of Students, for the Session 1854-55.

NAMES.	Absent.	Leave.	Sick.	Total.	No. of Roll-calls.
M. A. Misquitta	2	78	80	} 1061
Rustomjee Merwanjee .....	...	8	46	54
Henry Horne.....	5	15	166	186	
Hormusjee Bazunjee.....	2	7	35	44	
A. M. Continho .....	...	8	14	22
Burjorjee Ardaseer .....	...	...	...	...
Dhicerajram Dulputram.....	...	35	12	47	} 1402
Cooverjee Dorabjee .....	...	2	6	8
Angelino de Souza.....	2	18	24	44	
Cursetjee Framjee.....	3	1	22	26	
Cowasjee Nowrojee	6	24	65	95	
Bazunjee Rustomjee	2	179	299	480	
Jumnadas Hurgovindas.....	1	...	9	10	} 827
A. P. D'Andrade .....	...	1	...	1
Rustomjee Cowasjee.....	...	...	1	1
Bhicajee Amroot	3	8	14	25	
Wamon Wasoodave	2	9	12	23	
Ramchundra Narrayen.....	...	...	25	25
Eduljee Nesserwanjee	3	3	} 597
Jejeebhoy Bazunjee .....	...	...	...	...
Anundrao Wasoodave .....	...	24	25	49
Hurry Vishnoo .....	...	2	...	2
Burjorjee Framjee.....	2	3	15	20	
Pestonjee Muncherjee .....	...	2	...	2
Pestonjee Bomanjee	1	1	}
Manockjee Aderjee .....	...	2	5	7

JOHN PEET,

Acting Principal, Grant Medical College.

APPENDIX E.

Return of Student-Apprentices who have attended the College during the Session 1854-55.

No.	NAMES.	Age at Admission.	Date of joining the College.	REMARKS.
1	Daniel O'Neil	22	15th June 1852.	
2	Charles Stephens	20	" "	
3	Henry Washington	19	" "	Received Certificate of Qualification.
4	Francis Pinto	20	" "	
5	Sylvester Cavanagh	18	1st Sept. 1852.	Received Certificate of Qualification.
6	Pandoo Chowan	22	15th June 1853.	
7	Dhunjeebhoy Cowasjee	20	" "	Resigned the Service.
8	William Wilson	16	" "	
9	William Duggan	17	" "	Transferred.
10	J. M. O'Brian	16	" "	Ditto.
11	Joaquim Silvester	18	" "	
12	James Kinlock	19	" "	
13	Joseph Neil	19	" "	
14	Edward McGeoch	17	" "	
15	R. L. McLean	19	" "	

No.	NAMES.	Age at Admission.	Date of joining the College.	REMARKS.
16	Andrew Collins	17	15th June 1853.	Discharged the Service.
17	J. H. Bedford.....	16	" "	
18	George B. Lloyd.....	19	" "	Transferred.
19	EHapah Lingoo	17	28th June 1853.	
20	John Caray Shaw.....	17	15th June 1854.	
21	Patrick Edward Daniell	18	" "	Transferred.
22	Robert Rotchell	17	" "	
23	Mahadoo Joglakur	17	" "	
24	John Edmonds	17	" "	
25	William Wright	18	" "	
26	Wisram Ramjee	19	" "	
27	Pearson Smith.....	17	" "	
28	Shaik Cassim	19	" "	
29	Robert Cox	17	" "	
30	John Tearuan	18	" "	
31	John McLean	17	22nd June 1854.	Transferred.

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX F.

*Abstract of Roll-calls of Student-Apprentices, for the
Session 1854-55.*

NAMES.	Absent.	Leave.	Sick.	Total.	No. of Roll-calls.
S. Cavanagh	5	19	12	36	1061
H. Washington .....	..	8	94	102
F. Pinto .....	..	2	44	46
C. Stephens	22	4	83	109	
D. O'Neil	4	12	66	82	
J. Kinlock	1	79	80	1126
J. Sylvester .....	..	31	131	162
Pandoo Chowan .....	..	..	1	1
W. Wilson	17	10	143	170	
Ellapah Lingoo	8	15	54	77	
J. Neil	6	..	186	192	639
R. L. McLean	6	13	57	76	
J. H. Bedford	16	127	190	333	
E. McGeech	32	23	32	87	
J. C. Shaw	15	2	133	150	
R. Rotchell	29	16	140	185	639
Mahadoo Joglakur	1	3	15	19	
J. Edmonds	15	..	7	22	
W. Wright	9	10	26	45	
Wisram Ramjee .....	..	..	..	..
P. Smith	27	7	69	103	639
Shaik Cassim	9	2	43	54	
R. Cox	65	9	75	149	
J. Tearnan	60	5	84	149	

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX G.

Return of Warrant Medical Officers and Hospital Assistants who have attended the College during the Session 1854-55.

No.	NAMES.	Rank.	Date of joining the College.
1	J. Lawrence.	Steward	25th October 1854.
2	C. R. McMorris . .	Assistant Apothecary.	16th August 1853.
3	Sewappa Nursing. .	1st Hospital Assistant	16th July 1854.
4	Vincent Amor	Ditto.	15th June 1853.
5	J. D. Rozario	Ditto.	15th June 1852.
6	Crustnajejee Dumajejee	Ditto.	14th Sept. 1854.
7	F. Lobe	2nd Hospital Assistant.	15th June 1853.
8	W. Walker	Ditto.	15th June 1854.
9	Ramjee Mangrakur	Ditto.	Ditto.
10	Gungajejee Nursoo. .	Ditto. .	29th July 1854.
11	Arjoon Govind . . .	Ditto.	15th June 1854.

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX H.

NUMBERS IN ATTENDANCE IN THE COLLEGE.

STUDENTS.

Remained at the close of last Session	18
Admitted at commencement of this Session	11
Total.	<u>29</u>

STUDENT-APPRENTICES.

Remained at the close of last Session	19
Admitted at commencement of this Session.	12
Total.	<u>31</u>

WARRANT OFFICERS AND HOSPITAL ASSISTANTS.

Number attending during the Session	11
Grand Total.	<u>71</u>

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX I.

STATEMENT OF THE NUMBERS ATTENDING THE SEVERAL COURSES OF LECTURES.

ANATOMY.

Students	20
Warrant Officers and Hospital Assistants	11
Student-Apprentices	26
Total. . . .	<hr/> 57

CHEMISTRY.

Students	20
Warrant Officers and Hospital Assistants	11
Student-Apprentices	12
Total. . . .	<hr/> 43

MATERIA MEDICA.

Students	9
Warrant Officers and Hospital Assistants	11
Student-Apprentices	12
Total. . . .	<hr/> 32

PHYSIOLOGY.

Students	9
Warrant Officers and Hospital Assistants	4
Student-Apprentices	14
Total. . . .	<hr/> 27

PRINCIPLES AND PRACTICE OF MEDICINE.

Students	12
Warrant Officers and Hospital Assistants	4
Student-Apprentices	19
Total....	<hr/> 35

SURGERY.

Students	12
Warrant Officers and Hospital Assistants	4
Student-Apprentices	18
Total....	<hr/> 34

MIDWIFERY.

Students	9 *
Warrant Officers and Hospital Assistants	4
Student-Apprentices	5
Total....	<hr/> 18

MEDICAL JURISPRUDENCE.

Students	9
Warrant Officers and Hospital Assistants	3
Student-Apprentices	5
Total....	<hr/> 17

OPHTHALMIC SURGERY.

Students	9
Warrant Officers and Hospital Assistants .....	..
Student-Apprentices	5
Total....	<hr/> 14

JOHN PEET,

*Acting Principal, Grant Medical College.

APPENDIX J.

Return of the Sick treated in the Clinical Medical Ward of the Jamsetjee Jejeebhoy Hospital, in the Session 1854-55, from 15th June 1854 to 15th March 1855.

NAMES OF DISEASES.	Number Ad- mitted.		Number Dis- charged.	Died.	Total.	REMARKS.
EPHEMERAL.....	1	1	1	..	1	
Quotidian	41	40	1	1		
" C. Enlarged Spleen.....	6	6	..	..
" Bronchitis	8	8	..	..
" Phthisis	4	3	1	1		
" Hepatitis, Jaundice	2	2	..	..
" Pneumonia	2	2	..	..
" Dysentery	1	1	..	..
" Chronic Dysentery and Phthisis	1	1	..	..
" Syphilitic Rheumatism ..	1	1	..	..
Double Quotidian	1	1	..	..
Tertian	3	3	..	..
" C. Phthisis Pulmonalis	1	1	..	..

Fever.		78	
Remittent.	Double Tertian	1	1 ..
	Quartan, C. Enlarged Spleen	1	1 ..
	Simple	8	7 1
	" C. Head Symptoms	4	3 1
	" Pneumonia	6	5 1
	" " and Enlarged Spleen ..	1	1 ..
	" " and Head Symptoms ..	1	1 ..
	" Bronchitis	9	8 1
	" " and Phthisis	1	1 ..
	" Enlarged Spleen	3	2 1
ABDOMINAL DISEASES	" Acute Dysentery, and En- larged Spleen	1	1 ..
	" Chronic Dysentery	1	.. 1
	" Congestion of the Liver, and Enlarged Spleen	1	1 ..
	" Jaundice	1	1 ..
	Hepatitis	5	3 2
	Hepatic Abscess	10	7 3
	Jaundice	1	1 ..
	Diarrhoea	1	1 ..
	Dysentery	16	16 1
	Bright's Disease	7	3 4
THORACIC DISEASES	Dyspepsia	1	1 ..
	Gastro-enteritis	1	1 ..
	Pneumonia	6	5 1
	" C. Pleuritis	5	3 2
	" Bronchitis	2	2 ..
	" Phthisis	2	2 ..
	" Dysentery	1	1 ..
	Bronchitis	1	1 ..
		37	
		42	

NAMES OF DISEASES.	REMARKS.				
	Number Admitted.	Number Discharged.	Died.	Total.	
THORACIC DISEASES.....					
{ Pleuritis	2	..	2		
" Phthisis	1	1	..		
Phthisis Pulmonalis	14	12	2		
" Enlarged Spleen & Liver.	1	1	..		
Asthma	4	4	..		
Diseases of Heart and Valves (Aorta and Mitral)	7	5	2		
				47	
DISEASES OF THE NERVOUS SYSTEM					
{ Epilepsy	3	2	1		
Hemiplegia	3	3	..		
Paraplegia	2	1	..		
Tetanus (Idiopathic)	4	1	3		
				12	
OTHER DISEASES					
{ Scurvy	3	2	1		
Rheumatism	4	4	..		
Ascites	3	2	1		
General Dropsy	1	1	..		
Anemia	1	1	..		
Secondary Syphilis	1	1	..		
Cholera	4	3	1		
Small-pox	8	7	1		
				25	
Total.....	236	200	36	236	

JOHN PEET,
Acting Professor of Medicine, Grant Medical College.

*Note of the Principal Classes of Diseases treated in the
Jamsetjee Jejeebhoy Hospital, from 1st April 1854 to
31st March 1855.*

Admissions, 5,560.

Deaths, 902.

CLASSES OF DISEASES.	Admissions.	Deaths.
Fevers	917	69
Eruptive Fevers, chiefly Small-pox	73	21
Diseases of the Liver	60	27
Diseases of the Stomach and Bowels	882	320
Cholera, Epidemic	232	151
Diseases of the Brain	120	20
Dropsies	63	20
Rheumatic Affections	409	..
Veneral Affections, and Diseases of the Genital Organs	590	3
Abscesses and Ulcers	467	31
Wounds and Injuries	501	13
Diseases of the Lungs	293	90
Diseases of the Eye	49	..
Diseases of the Skin	199	17
Other diseases, including Poisoning by Arsenic, Datura, Opium, and Cases of Parturition	705	120
Total . . .	5,560	902

JOHN PEET, Assistant Surgeon,
Acting Surgeon, Jamsetjee Jejeebhoy Hospital.

Note of the Principal Classes of Diseases treated at the Jamsetjee Jejeebhoy Hospital Dispensaries, from 1st April 1854 to 31st March 1855.

DISEASES.	Males.	Females.	Children	Total.
Fevers.....	1,519	482	543	2,544
Affections of the Stomach and Bowels	797	346	395	1,538
Affections of the Air Passages ..	414	155	295	864
Rheumatic Affections.....	866	249	3	1,118
Venereal Affections.....	737	49	..	786
Skin Diseases	1,473	260	482	2,215
Uterine Diseases.....	..	139	..	139

Total Number treated at the Dispensaries, arranged according to Caste and Sex.

CASTE.	Males.	Females.	Children
Christians	716	209	
Mussulmans.....	3,592	703	
Hindoos	4,050	745	
Parsees.....	1,211	732	
Children of both sexes, under 7 years of age .....	..	2,431	
Total....	9,569	2,389	2,431
Grand Total....	14,389		

JOHN PEET, Assistant Surgeon,
Acting Surgeon, Jamsetjee Jejeebhoy Hospital.

APPENDIX K.

Table of Diseases and Injuries treated in the Clinical Surgical Ward, during the Session 1854-55.

NAMES OF DISEASES.	Admitted.	Cured.	Dis- charged.	Died.	REMARKS.
Abscess, Acute	4	1	3	..	
Aneurism of Carotid Artery	1	1 ^a	..	..	^a Ligature of common carotid.
Anthrax	1	..	..	1	
Burns, 2nd degree	3	3	..	..
Caries	8	3	5 ^b	..	^b Lungs diseased in all.
Diseases of Bones ..	1	..	1	..	
{ Necrosis, Acute	1	1	..	..
{ Otitis	1	4 ^c	1	..	
{ Tumours	5	..	2	..	
Diseases of Joints ...	2	..	1	..	^c Excision of part of lower jaw in two cases.
{ Acute Synovitis	2	1	1	..	
{ Calculus Vesicæ	3	2	..	1 ^d	^d High operation, on account of size of calculus.
{ " Urethræ	1	1	..	..
Diseases of Urinary and Generative Or- gans	6	3	3	..	
{ Stricture of Urethra ..	1	1 ^e	..	..	^e Excision.
{ Elephantiasis Scroti ..	1	1	..	..
{ Fungus Testis	1	1	..	..	^f Circumcision.
{ Phymosis	1	1 ^f	..	..	^g Died of tetanus.
Dislocation, Compound, of Ankle	1	..	..	1 ^g	

NAMES OF DISEASES.	Admitted.	Cured.	Discharged.	Died.	REMARKS.
Fistula and Sinus	3	..	3	..	
{ Femur	4	4	..	..
{ Cervix Femoris.	2	..	2	..	
{ Leg	13	8	4h	1	h Three under treatment.
{ Humerus	8	6	2	..	
{ Forearm	6	3	3	..	
{ Clavicle	3	3	..	..
{ Skull	1	..	..	li	i Compression from extravasated blood, trephining.
{ Nasal Bones ..	1	1	..	..
{ Lower Jaw	2	2	..	..
{ Ribs	3	2	..	lh	h Emphysema and pneumothorax. Paracentesis.
{ Leg	6	1	2	3l	l One died of gangrene, one of tetanus; two limbs amputated.
{ Humerus	1	1	..	..
{ Forearm	2	2m	..	..	m One primary and one secondary amputation.
{ Scapula	1	..	1	..	
{ Hand and Foot.	4	4n	..	..	n Four amputations of fingers or toes.
{	1	..	1	..	
{	2	2o	..	..	o Excision.
{	2	1	1	..	
{	2	..	1	..	
{	1	1	..	..
{	1	1	..	..
{	1	1	..	..
{	4	3p	1q	..	p Operation. q Admitted with sloughing of intestine.
{ Strangulated Inguinal Hernia	2	..	2	..	
{ Syphilis	3	1	2	..	
{ Primary .....	..	..	..	..
{ Secondary .....	..	..	..	..

FRACTURES.

{ Simple.....

{ Compound.

Tumours	3	1	2	..		
Ulcers	6	1	5	..		
Wounds	{	Contused	8	3	2	37
		Incised	3	2	1	..
		" of Throat	3	2	..	1
		Punctured, of Abdomen	1	1 ^s	..	..
Total..	144	80	51*	13		

* Of these, 30 were relieved, or made out-patients when nearly well, and 21 unrelieved, or discharged at their own request.

G. R. BALLINGALL,
Acting Professor of Surgery.

Table of Capital and Minor Operations performed in presence of, or by the Students, during the Session 1854-55.

Amputation of Thigh	1
Ditto of Leg	2
Ditto at Ankle-joint (Syme's)	2
Ditto at Tarsus (Chopart's)	1
Ditto of Arm	1
Ditto of Forearm	1
Ligature of common Carotid Artery	1
Lithotomy	3
Excision of Lower Jaw (partial)	3
Strangulated Inguinal Hernia	4
Excision of Hypertrophied Scrotum	1
Removal of Tumours	8
Ditto of Warts and Condylomata	2
Ditto of Nail, for Onychia	2
Ditto of Calculus from Urethra	3
Ditto of Foreign Bodies from Nose	2
Ditto of Polypus of Nose and Ear	4
Ditto of Necrosed Bone	6
Opening Abscesses and Whitlows	176
Passing Catheters and Sounds	136
Extraction of Teeth	145
Tapping Hydrocele	57
Amputation of Fingers and Toes	9
Excision of Hemorrhoids	4
Ditto of Metacarpal Bone of Thumb	1
Puncturing Ganglion	2
Circumcision	2
Slitting Prepuce	3
Dividing Frenum of Prepuce	1
Reducing Paraphymosis	3
Incising Carbuncle	7
Paracentesis Abdominis	1
Ditto Thoracis	1
Ligature of Nævus	1
Operation for Anchyloblepharon	1
Division of Cicatrix of Burn	1
Venesection	1
Reducing Dislocation of Lower Jaw	2
Ditto Strangulated Hernia	1
Division of Tendo Achillis (club-foot)	2
Trephining	1
Rhinoplastic Operation	1
Total..	606

G. R. BALLINGALL,
Acting Professor of Surgery.

APPENDIX L.

OBSTETRIC INSTITUTION.—SESSION 1854-55.

Total Number of Admissions from 1st April 1854 to 30th March 1855, 36; viz. 6 on account of Diseases or Disorders of Pregnancy, and 30 on account of Parturition.

Labours.		Castes.		Result to Mothers.		Result to Children.		Sex of Children.	
Natural.....	22	Christians ..	9	Recovered	26	Born alive ..	22	Males	14
Instrumental.....	5	Hindoos	9	Died	2	Born dead ..	8	Females	16
Præternatural (Turning Cases).....	3	Parsees.....	6	Left the Hospital	} 2				
		Mussulmans..	6	Result not known.					
Total..	30	Total..	30	Total..	30	Total..	30	Total..	30

XXXIX

Bombay, 12th April 1855.

W. C. COLES, M.D.,
Professor of Midwifery.

APPENDIX M.

Result of First Certificate Examination, Session 1854-55.

No. of Years	Names.	Anatomy.	Physiology.	Materia Medica.	Botany.	Chemistry.	Practical Chemistry.	Practical Anatomy.	REMARKS.
5	Hormusjee Bazunjee ..	Qualified.	Qualified.	Qualified.	Qualified.	Qualified	Qualified	Qualified	Qualified.
5	Henry Horne	Qualified.	Not qualified.	Not qualified.	Not qualified.	Qualified	Qualified	Qualified	Not qualified
4	A. de Souza	Qualified.	Qualified.	Qualified.	Qualified.	Qualified	Qualified	Qualified	Qualified.
3	Cursetjee Framjee	Qualified.	Qualified.	Qualified.	Qualified.	Qualified	Qualified	Qualified	Qualified.
3	Cowasjee Nowrojee	Not qualified.	Qualified.	Qualified.	Qualified.	Qualified	Qualified	Qualified	Not qualified
3	Bazunjee Rustomjee ..	Qualified.	Qualified.	Qualified.	Qualified.	Qualified	Qualified	Qualified	Qualified.

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX N.

GRANT MEDICAL COLLEGE.

The Annual Examinations at the Grant Medical College will commence on Saturday the 10th March, and be conducted in the following manner :—

I.—EXAMINATION OF CANDIDATES FOR “FIRST EXAMINATION” CERTIFICATES.

Saturday, 10th March.—Practical Anatomy.

Monday, 12th.—Written examination in Anatomy, and in Physiology.

Tuesday, 13th.—Written examination in Chemistry.

Wednesday, 14th.—Oral examination in Anatomy.

Thursday, 15th.—Written examination in Materia Medica.

Friday, 16th.—Oral examination in Chemistry.

Saturday, 17th.—Oral examination in Materia Medica, and in Botany.

Monday, 19th.—Oral examination in Physiology.

Tuesday, 20th.—Practical Chemistry, and Pharmacy.

II.—EXAMINATION OF CANDIDATES FOR THE DIPLOMA OF GRADUATE, CONDUCTED BY THE GOVERNMENT EXAMINER AND ASSESSORS. *

Wednesday, 21st March.—Operative Surgery.

Friday, 23rd.—Written examination in Medicine.

Saturday, 24th.—Written examination in Surgery, and Ophthalmic Surgery.

Tuesday, 27th.—Oral examination in Medicine.

Wednesday, 28th.—Oral examination in Surgery, and Ophthalmic Surgery.

Friday, 30th.—Written examination in Midwifery.

Saturday, 31st.—Written examination in Medical Jurisprudence.

Tuesday, April 3rd.—Oral examination in Midwifery.

Wednesday, 4th.—Oral, and Practical examination in Medical Jurisprudence.

Examinations in the Jamssetjee Jejeebhoy Hospital, in Clinical Medicine, and in Clinical Surgery, were commenced in February.

III.—EXAMINATION OF COLLEGE STUDENTS.

1st and 2nd Year Students.

Saturday, 10th March.—Practical Anatomy.

Monday, 12th.—Written examination in Anatomy, and in Physiology.

Tuesday, 13th.—Written examination in Chemistry.

Wednesday, 14th.—Oral examination in Anatomy.

Thursday, 15th.—Written examination in Materia Medica.

Friday, 16th.—Oral examination in Chemistry.

Saturday, 17th.—Oral examination in Materia Medica, and Botany.

Monday, 19th.—Oral examination in Physiology.

Tuesday, 20th.—Practical Chemistry, and Pharmacy.

3rd and 4th Year Students.

Friday, 23rd.—Written examination in Medicine, and in Surgery.

Saturday, 24th.—Written examination in Midwifery, and in Medical Jurisprudence.

Friday, 30th.—Oral examination in Medicine, and in Surgery and Ophthalmic Surgery.

Saturday, 31st.—Oral examination in Midwifery, and in Medical Jurisprudence.

The 3rd Year Students who do not present themselves for examination for “First Examination” Certificates, will be exa-

mined in Anatomy, Physiology, and Materia Medica, with the 2nd Year Students.

IV.—EXAMINATION OF STUDENT-APPRENTICES.

1st and 2nd Year Student-Apprentices.

Tuesday, 13th March.—Anatomy, and Physiology.

Thursday, 15th.—Chemistry, and Materia Medica.

Friday, 23rd.—Medicine, and Surgery.

3rd Year Student-Apprentices.

Saturday, 10th March.—Practical Anatomy.

Tuesday, 13th.—Oral examination in Anatomy, and Physiology.

Wednesday, 14th.—Written examination in Materia Medica.

Thursday, 15th.—Oral examination in Chemistry, and Materia Medica.

Saturday, 17th.—Written examination in Medicine, and in Surgery.

Tuesday, 20th.—Practical Chemistry, and Pharmacy.

Wednesday, 21st.—Operative Surgery.

Friday, 23rd.—Oral examination in Medicine.

Wednesday, 28th.—Oral examination in Midwifery.

Friday, 30th.—Oral examination in Surgery.

Saturday, 31st.—Oral examination in Medical Jurisprudence.

V.—EXAMINATION OF WARRANT MEDICAL OFFICERS.

Friday, 23rd March.—Anatomy, and Physiology.

Saturday, 24th.—Chemistry, and Materia Medica.

Friday, 30th.—Medicine, and Surgery.

Saturday, 31st.—Midwifery, and Medical Jurisprudence.

Hospital Stewards, Assistant Apothecaries, and Native Hospital Assistants, desirous of undergoing the Examination contemplated in the 35th Article of the Government Order dated 2nd April 1851, are requested to give in their names to the Principal before the 20th of March.

From these examinations will be awarded the *Carnac, Farish, Anderson, and Reid* Scholarships; *Sir Jamsetjee Jejeebhoy* Annual Prize to the Students of the College; and the *Burnes Medal* to the best 3rd Year Student-Apprentice. The *Willoughby* Medical Prize of Rs. 300 will be awarded in the first week of April. Candidates are referred to the Government Notification dated October 24th, 1854.

The Examinations on each day will commence at 11 o'clock A. M., and the attendance of Medical Gentlemen, and others interested in Medical Education, will be acceptable.

J. DON, M.D.,
Government Examiner.

J. PEET,
Acting Principal, Grant Medical College.

Bombay, March 1st, 1855.

Scheme of the Grant College Examinations. Session 1854-55.

Dates.	"First Certificate" Examinations.	Diploma Examinations.	COLLEGE STUDENTS.		STUDENT-APPRENTICES.		Warrant Officers.
			1st and 2nd Year.	3rd & 4th Year.	1st & 2nd Year.	3rd Year.	
Saturday, Mar. 10th	Practical Anatomy.		Practical Anatomy.			Practical Anatomy.	
Monday, " 12th	Anatomy and } W.		Anatomy & } W.				
Tuesday, " 13th	Physiology, } W.		Physiology, } W.		Anatomy & } O.		
Wednesday, " 14th	Chemistry, } W.		Chemistry, } W.		Physiology, } O.		
Thursday, " 15th	Practical Chemistry,		Practical Chemistry,		Materia Medica, W.		
Friday, " 16th	Anatomy, O.		Anatomy, O.		Chemistry and } O.		
Saturday, " 17th	Materia Medica, W.		Materia Medica, W.		Mat. Med., } O.		
Monday, " 18th	Chemistry, O.		Chemistry, O.		Med. & Surg., W.		
Tuesday, " 19th	Materia Medica & Botany, O.		Materia Medica & Botany, O.				
Wednesday, " 20th	Physiology, O.		Physiology, O.				
Thursday, " 21st	Practical Chemistry and Pharmacy.		Practical Chemistry and Pharmacy.				
Friday, " 22nd		Operative Surgery, Medicine, W.		Medicine & } W.	Medicine & } O.		Anatomy and Physiology.
Saturday, " 23rd		Surgery, W.		Midwifery and Med. Jurisp., } W.	Surgery, } O.		Chemistry and Mat. Med.
Monday, " 24th		Medicine, O.		Medicine & } O.	Midwifery, } O.		
Tuesday, " 25th		Midwifery, W.		Medicine & } O.	Surgery, } O.		Medicine and Surgery.
Wednesday, " 26th		Medl. Jurisp., W.		Medicine & } O.	Medical Jurisprudence, } O.		Midwifery and Med. Jurisp.
Thursday, " 27th		Midwifery, W.		Medicine & } O.			
Friday, " 28th		Medl. Jurisp., W.		Medicine & } O.			
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APPENDIX O.

FIRST CERTIFICATE EXAMINATION.

ANATOMY AND PHYSIOLOGY.

1. Suppose the pharynx opened in its median line behind, and its mucous membrane removed—describe the parts you would see, and include the interior of the larynx in your description.

2. What is the structure of the rectum and its muscles? Give minutely its relation to surrounding parts, and mention from whence its supply of blood is derived.

3. What are the nerves derived from the lumbar plexus, and what parts are supplied by them?

1. What changes does the mucous membrane of the small intestine undergo during digestion in that tube?

2. Contrast the respiratory membrane of man with that of a bird, and a fish. Mention through what membrane the interchange of gases takes place.

3. State what are the functions of the cerebellum. Illustrate them by experiments, comparative anatomy, and pathology; and include the objection to the celebrated theory of Gall.

J. H. SYLVESTER,

Acting Professor of Physiology.

Monday, March 12th, 1855.

CHEMISTRY.

1. In a given specimen of impure air, how would you determine the quantity of carbonic acid and of sulphuretted hydrogen which it might contain?

2. Mention and explain some of the natural phenomena which depend both on the radiation and convection of caloric.

3. What are the alkaline earths? How may they be distinguished from all other substances, and from each other?

4. Explain the phenomena of the alcoholic and acetous fermentations, with the relations that subsist between grape sugar, alcohol, and acetic acid.

HERBERT GIRAUD,
Professor of Chemistry.

Tuesday, March 13th, 1855.

MATERIA MEDICA.

1. Give the leading characteristics, botanical and chemical, of the cruciferæ. Mention the kinds of products yielded by the officinal species; the uses and applications of the latter in medicine and dietetics.

2. Describe the mode of preparing nitrate of silver. To what adulterations is it subject, and how may they be detected? Mention its therapeutic applications.

3. Point out the distinctions between tonics, stimulants, and irritants. Mention such tonics as may occur to you, and specify briefly the differences in their respective modes of action, and the chief forms of disease to which each is more particularly applicable.

4. How is chloroform prepared? Describe its physical and chemical properties, and the means of estimating its purity; its effects and uses, and the precautions to be taken in its employment.

ROBERT HAINES,
Professor of Materia Medica.

Thursday, March 15th, 1855.

BOTANY.

1. What are the 'distinctive anatomical characters of the great natural divisions of the vegetable kingdom?'
2. What are the chief physiological relations of plants to the air and the soil in which they grow?

HERBERT GIRAUD,
Professor of Botany.

Thursday, March 15th, 1855.

APPENDIX P.

REPORT OF THE FINAL EXAMINATION BY THE
GOVERNMENT EXAMINER.

TO W. HART, Esquire,

Secretary to Government, General Department.

SIR,

The Final Examination of Candidates for the Diploma of Graduate of the Grant Medical College having been completed yesterday, I have the honour to submit a Report of the proceedings, for the information of Government and the Board of Education.

2. The Examinations were conducted, in accordance with the Regulations of the College, by myself, assisted by three Assessors appointed by Government, Surgeons Stovell and Arbuckle, and Assistant Surgeon Mead, and by the Principal and Professors ; and the manner I shall proceed to describe.

3. The Clinical Examinations in Medicine and Surgery were commenced after my appointment as Government Examiner, on the 24th February, and continued every alternate day till the 10th of March, from 7 till 9 o'clock A. M. Fresh cases, as they were received into Hospital, were presented to the Candidates ; the origin, progress, and treatment of the diseases were recorded ; and generally the diagnosis was most correct, and the prescriptions appropriate. In Medicine, cases of fever, intermittent and remittent, with complications, pneumonia, hepatitis, diarrhœa and dysentery, dropsy, &c. came under observation ; while in Surgery, cases of fracture, simple and compound, wounds, ulcers of different kinds, retention of urine, &c. were daily recorded.

The diaries in both Medicine and Surgery were most satisfactorily kept, and in the treatment of cases in the latter, opportunities of bandaging and dressing were taken advantage of, and performed with dexterity.

4. On the 20th March, the Candidates performed in the dissecting-room some of the capital operations in Surgery. Each took up a principal artery, the common carotid, the subclavian, or the external iliac ; performed an amputation at the shoulder joint, the flap operation at the thigh or leg ; and all performed the lateral operation of lithotomy. They were all successfully performed, without an exception, and clearly showed (with previous dissections that I had witnessed) the knowledge of the Candidates in Surgical Anatomy, and in Operative Surgery.

5. On the 23rd, written questions in Medicine, and on the 24th in Surgery, were submitted, as per papers marked A and B, with the usual precaution of seclusion from access to books, and communication with each other. The questions were given at 11 A.M., and at 5 P.M. answers were returned, creditably showing their knowledge of the subjects treated of. On the 27th a searching oral examination in Medicine, and on the 28th in Surgery, took place. The former embraced the subject of fevers, inflammation, the principal diseases of the three great cavities,—the head, the chest, and the abdomen,—the diseases of the nervous and circulating systems, &c. ; in Surgery, wounds, fractures, simple and compound, dislocations, diseases of the joint, tumours, malignant and non-malignant, &c., were the subjects of examination. In all these, the Candidates acquitted themselves to the satisfaction of the Assessors and myself.

6. On the 30th, written questions in Midwifery, and on the 31st in Medical Jurisprudence, as per papers marked C and D, were submitted, and the answers returned, under similar circumstances of seclusion, about 5 P.M. These answers were equally satisfactory, as were those in Medicine and Surgery.

On the 3rd April, the Candidates were submitted to the same strict oral examination in Midwifery, and on the 4th in Medical Jurisprudence, again entirely to the satisfaction of the Examiners. After the last oral examination, practical exercises in the labora-

tory were carried on by the Candidates, each analyzing a solution, supposed to contain poison. These poisons were arsenious acid, bichloride of mercury, and opium, and the analyses were most correctly performed. Three substances, alike in appearance, were then submitted (nitrate of potass, sulphate of magnesia, and oxalic acid), one to each Candidate, and it was required of them analytically to show what the substances were. This was also accomplished without a single mistake.

7. The result of these long and strict Examinations is, that the three Candidates are found qualified for the Diploma of Graduate, and that they rank in merit in the following order:—

- | | |
|-------------------------|----------|
| 1, M. A. Misquitta .. | } Equal. |
| 2, Hormusjee Bazunjee . | |
| 3, Rustomjee Merwanjee. | |

I beg to submit, for the favourable consideration of Government, that these Graduates be appointed Sub-Assistant Surgeons.

8. I cannot close this Report without recording, that the proceedings throughout prominently showed the great ability and zeal with which instruction had been conveyed by the Acting Principal and the Professors, and the aptitude and assiduity with which the Students had profited thereby.

I have the honour to be, Sir,

Your most obedient Servant,

(Signed) J. DON, M.D.,

Inspector General of Hospitals,
Government Examiner.

Bombay, 6th April 1855.

DIPLÔMA EXAMINATIONS.

A.

23rd March 1855.

MEDICINE.

1. Give a definition of disease. State what is meant by epidemic, endemic, and contagious diseases. Describe shortly the different modes in which disease may terminate in death.

2. What are the diseases to which the lungs are liable? Enumerate the symptoms and physical signs of pneumonia, in its different stages. State the treatment of each stage, and mention how you would judge of improvement under treatment.

3. Mention the pathological conditions in which albumen is found in the urine. State the causes, symptoms, and treatment of Bright's disease of the kidney.

4. What is the pathology of dropsy? State the causes that give rise to the accumulation of fluid in the abdominal cavity, and the indications of cure.

5. Describe the symptoms, causes—predisposing and exciting—of acute dysentery. State the progress of a case towards recovery under appropriate treatment; and of one to a fatal termination, and the appearances usually found on examination after death.

6. What are the kinds of fever usually met with at different seasons in Bombay? What are the complications of remittent fever? State the treatment under these complications.

J. DON, M.D.,
Government Examiner.

B.

7th March 1855.

SURGERY.

1. Describe the various kinds of abdominal hernia, and the points of the parietes through which the protrusion may occur.

What is strangulated hernia? Detail the symptoms, and the measures to be had recourse to for relief before operating, and the symptoms that demand the immediate use of the knife. Describe the operation for strangulated inguinal hernia, and the dangers during and after its performance.

2. Enumerate the causes of retention of urine, and describe the appropriate treatment. Describe the operation for puncturing the bladder.

3. State shortly the pathology of ulceration, and enumerate the different kinds of ulcers, their characteristic appearance, and the treatment of each kind.

4. What are the symptoms of stone in the bladder? Describe the more common varieties of urinary calculi, as regards their appearance, and chemical composition. Describe the lateral operation of lithotomy, and the dangers during and after its performance.

5. State the dangers of a compound dislocation of the ankle-joint, and the circumstances that would lead you to decide on amputation, or upon the endeavour to save the limb.

6. What are the different kinds of cataract? Describe the operation for cataract, and mention that best suited for each kind.

J. DON, M.D.,
Government Examiner.

C.

30th March 1855.

MIDWIFERY.

1. Describe the different forms of uterine hæmorrhage, before, during, and after the birth of the child; and detail the treatment of each.

2. In what cases is turning necessary? What are its dangers; and how would you perform the operation?

3. Define natural labour. Describe the occurrences of each stage, and the duties of the obstetrician. What do you understand by difficult, præternatural, and complex labours?

4. Describe the state of the uterus after a natural labour ; and the changes that take place in it, and in the system generally, during the next ten days.

5. Describe the pathology of phlegmasia dolens ; its causes, and treatment.

6. How would you judge of the protective influence of vaccination, both during the maturation of the vesicle, and from the appearance of the cicatrix ?

J. DON, M.D.,
Government Examiner.

D.

31st March 1855.

MEDICAL JURISPRUDENCE.

1. If you were called upon to pronounce whether an exhumed skeleton were male or female, of what age or stature, how would you distinguish these points ?

2. How would you distinguish between a wound inflicted before and one made after death, as respects the two classes of incised and contused wounds ?

3. What do you understand by the word poison ? Mention the different classes into which poisons are divided, and describe shortly the local and remote actions of poisons generally on the human frame.

4. The contents of a stomach, supposed to contain a preparation of arsenic, are submitted to you for examination : describe the processes you would employ to detect the presence of the poison, and state the tests upon which you would chiefly rely to prove that arsenious acid was the poison swallowed.

5. What are the causes of death by drowning ; and what are the best means of recovering a person apparently dead from submersion in water ?

6. What are the diseases that disqualify for military service ; and how would you proceed to examine a recruit ?

J. DON, M.D.,
Government Examiner.

APPENDIX Q.

OUTLINE OF THE COURSE OF BOTANICAL LECTURES.

INTRODUCTION TO THE STUDY OF BOTANY.

I.—STRUCTURAL AND MORPHOLOGICAL BOTANY.

1. Elementary tissues of plants—
 - Cellular tissue.
 - Vascular tissue.
 - Contents of the vegetable tissues.
 - Integumentary tissues.
2. Nutritive organs of plants—
 - Root, or descending axis.
 - Stem, or ascending axis.
 - Various forms of stems and branches.
 - Internal structure of stems.
 - Exogenous stems.
 - Endogenous stems.
 - Acrogenous stems.
 - Leaves, and their modifications.
3. Reproductive organs of plants—
 - In flowering plants.
 - Inflorescence.
 - The flower and its morphology.
 - Floral envelopes.
 - Essential reproductive organs.
 - In flowerless plants.

II.—PHYSIOLOGICAL BOTANY.

- Motions of the fluids of plants—

Respiratory and assimilative functions.
 Relations of plants to the air and to the soil.
 Reproductive functions.
 Germination.

III.—SYSTEMATIC BOTANY.

General principles of classification—

Artificial systems :

The Linnæan system.

Natural systems :

The natural system of De Candolla.

The following natural families were treated of, and illustrated by living specimens, when possible ; and by plates and diagrams :—

Anonacææ.	Papaveracææ.
Cruciferææ.	Malvacææ.
Aurantiacææ.	Guttiferææ.
Meliacææ.	Ampelideææ.
Terebinthacææ.	Leguminosææ.
Rosacææ.	Myrtacææ.
Cucurbitacææ.	Umbelliferææ.
Rubiacææ.	Compositææ.
Apocynææ.	Asclepiadææ.
Convolvulacææ.	Solanææ.
Labiataæ.	Scrophularinææ.
Laurinææ.	Euphorbiacææ.
Urticacææ.	Conifera.
Orchidææ.	Scitamineææ.
Marantacææ.	Musacææ.
Palmææ.	Graminæææ.
Filices.	Musci.
Lichenes.	Algææ.
Characæææ.	Fungi.

In the department of Structural Botany, microscopic demonstrations of the various tissues were given. *J*

HERBERT GIRAUD,
 Professor of Botany.

APPENDIX R.

GRANT MEDICAL COLLEGE.

NOTIFICATION.

The following Scholarships and Prizes will be open for competition at the close of the Session 1854-55, viz. in the month of April 1855 :—

I.

To the Fourth and Third Year Students.

A CARNAC Scholarship, of Rupees 25 monthly, to the best Anatomist, *Practical and Surgical Anatomy included.*

An ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency and zeal in the discharge of the duties of Clinical Clerk and Surgical Dresser.

II.

To the Fourth Year Students.

An ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency in, and practical knowledge of, Medicine, Surgery, and Midwifery.

In awarding this Scholarship, much importance will be attached to assiduous and regular attendance in the Clinical Wards, and to efficiency and zeal in the discharge of the duties of Clinical Clerk and Dresser.

III.

To the Third and Second Year Students.

A REID Scholarship, of Rupees 20 monthly, for the greatest proficiency in Anatomy and Physiology.

A FARISH Scholarship, of Rupees 20 monthly, for the greatest proficiency in Materia Medica and Practical Pharmacy.

IV.

To the Second and First Year Students.

A CARNAC Scholarship, of Rupees 15 monthly, for the greatest proficiency in Chemistry, both Theoretical and Practical.

V.

To the First Year Students.

AN ANDERSON Scholarship, of Rupees 15 monthly, for the greatest proficiency in the subjects of study during the Session.

A FARISH Scholarship, of Rupees 10 monthly, for the second degree of proficiency in the subjects of study.

A CARNAC Scholarship, of Rupees 10 monthly, for the greatest practical proficiency in compounding Medicine.

Sir Jamsetjee Jejeebhoy's Annual Medical Prize, of Rupees 250.

To be awarded to that Fourth or Fifth Year Student who, having passed his Final Examination, has, in the judgment of the Government Examiner, evinced in the Clinical Wards the greatest practical knowledge of Medicine, Surgery, and Midwifery, and has shown in the Laboratory the greatest practical acquaintance with the Toxicological branch of Medical Jurisprudence.

(Signed) JOHN PEET,
Acting Principal, Grant Medical College.

By order of the Board of Education,
M. STOVELL,
Secretary.

*Bombay, Board of Education,
24th October 1854.*

APPENDIX S.

SCHOLARSHIPS AND PRIZES AWARDED TO THE STUDENTS OF THE GRANT MEDICAL COLLEGE, AT THE CLOSE OF THE SESSION 1854-55.

1. A CARNAC Scholarship, of Rupees 25 monthly, for the greatest proficiency in Anatomy, Practical and Surgical included, open for competition to the 4th and 3rd Year Students, to *Cursetjee Framjee*, a 3rd Year Student.

2. AN ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency and zeal in the discharge of the duties of Clinical Clerk and Surgical Dresser, to *Mr. A. M. Continho* and *Burjorjee Ardaseer*; but as *Mr. Continho* is the successful competitor for another Scholarship, this was awarded to *Burjorjee Ardaseer*.

3. AN ANDERSON Scholarship, of Rupees 25 monthly, for the greatest proficiency in, and practical knowledge of, Medicine, Surgery, and Midwifery, open to 4th Year Students, to *Mr. A. M. Continho*.

4. A REID Scholarship, of Rupees 20 monthly, for the greatest proficiency in Anatomy and Physiology, open to 3rd and 2nd Year Students, to *Cursetjee Framjee*, a 3rd Year Student; but as a Carnac Scholarship has already been awarded to this Student, he will receive an honorary certificate, and the pecuniary part of it will descend to the next in proficiency, *Bazunjee Rustomjee*, a 3rd Year Student.

5. A FARISH Scholarship, of Rupees 20 monthly, for the greatest proficiency in Materia Medica and Pharmacy, open to 3rd and 2nd Year Students, to *Cowasjee Nowrojee*, a 3rd Year Student.

6. . A CARNAC Scholarship, of Rupees 15 monthly, for the greatest proficiency in Chemistry, both Theoretical and Practical, open to 2nd and 1st Year Students, to *Jumnadas Hurgovindas*, a 2nd Year Student.

7. An ANDERSON Scholarship, of Rupees 15 monthly, for the greatest proficiency in the subjects of study during the Session, open to 1st Year Students, to *Eduljee Nesserwanjee*.

8. A FARISH Scholarship, of Rupees 10 monthly, for the second degree of proficiency in the subjects of study during the Session, open to 1st Year Students, to *Manockjee Aderjee*.

9. A CARNAC Scholarship, of Rupees 10 monthly, for the greatest proficiency in Compounding Medicines, open to 1st Year Students, to *Ramchundra Narrayen*.

The SIR JAMSETJEE JEJEEBHAY Annual Medical Prize has been awarded by the Government Examiner to *Mr. M. A. Misquitta*.

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX T.

WRITTEN QUESTIONS IN ANATOMY, CHEMISTRY,
AND PHYSIOLOGY, TO 1ST AND 2ND YEAR STUDENTS;
AND IN MEDICINE, SURGERY, MIDWIFERY,
AND MEDICAL JURISPRUDENCE, TO
3RD AND 4TH YEAR STUDENTS.

1ST YEAR STUDENTS.

Anatomy.

1. Give the anatomy of the elbow joint*; including a description of the ends of the bones, the ligaments, and synovial membrane. Mention the movements of which this joint is capable, and by what muscles effected.

2. Describe the origin, insertion, and relations of those muscles, the tendons of which pass beneath the inner ankle to the foot.

3. Give a minute description of the astragalus and calcis bones. Mention the ligaments connecting them together, and at what points attached.

J. H. SYLVESTER,

Acting Professor of Anatomy.

Monday, March 12th, 1855.

2ND YEAR STUDENTS.

Anatomy and Physiology.

1. Describe the diaphragm. What is its position in the relaxed, and what in the contracted state?

2. How are the internal and external jugular veins formed ? Describe the relations of each in its entire course.

3. Give the dissection of the facial artery and its branches. Describe the structures you would remove in exposing the trunk of the vessel.

1. Describe the phenomena of coagulation ; and give the proportion of fibrine in healthy arterial blood.

2. Prove that carbonic acid is exhaled by the lungs. Give the number of cubic feet per day, and mention what circumstances modify that quantity.

3. Do the lacteal and lymphatic vessels absorb ? If so, state the reasons in support of this view of their function.

J. H. SYLVESTER,

Acting Professor of Physiology.

Monday, March 12th, 1855.

1ST AND 2ND YEAR STUDENTS.

Chemistry.

1. Explain the manner in which hydrosulphuric acid is prepared ; for what purposes it is employed as a test ; in what instances hydrosulphuret of ammonia is used ; and mention some of the characteristic effects of both these re-agents.

2. Explain the changes that occur in solutions of proto-salts of iron, by exposure to the air.

3. In what condition does the element chlorine exist in nature ; how may it be procured in its separate state ? What are its leading properties, and its chemical relations ?

4. What is the composition of the yellow and of the red prussiate of potash ; and what the effects of each of these salts upon the two classes of iron salts ?

HERBERT GIRAUD,

Professor of Chemistry.

Tuesday, March 13th, 1855.

2ND AND 3RD YEAR STUDENTS.

Materia Medica.

1. How is hydrocyanic acid prepared? What is the strength of the pharmacopœia preparation, and how may it be proved? Describe its physiological effects, and its uses and doses.

2. Mention the plants of the natural family euphorbiaceæ which yield medicinal agents, specifying the part of the plant from which they are obtained. Describe briefly their properties and uses, and show whether there be any general characteristic that pertains to them.

3. Describe the mode of formation, and the composition of alum, and mention its uses in medicine.

4. Describe the mode of preparation of calomel and corrosive sublimate, the difference in their physiological effects, and the doses in which they are respectively administered.

ROBERT HAINES,

Professor of Materia Medica.

Thursday, March 15th, 1855.

3RD AND 4TH YEAR STUDENTS.

Surgery.

1. Describe the difference between healthy or phlegmonous, and erysipelatous inflammation.

2. Describe the mode of healing of ulcers, with the general principles of treatment.

3. Describe the treatment of a penetrating wound of the abdomen, with protrusion and injury of the viscera.



1. State the treatment of a partial wound of a large artery, with the principle on which the treatment is founded.

2. State the causes of compression of the brain, the symptoms

which distinguish it from concussion, and the treatment to be adopted in the different forms.

G. R. BALLINGALL, M.D.,
Acting Professor of Surgery.

3RD AND 4TH YEAR STUDENTS.

Medicine.

1. Enumerate the signs and symptoms of inflammation, and state the principles of treatment.
2. Mention the most striking differences between remittent and hectic fever.
3. State the usual *post-mortem* appearances in acute dysentery.

1. What are the more common predisposing causes of disease? Mention those which are usually more or less in operation amongst the lower classes of the community in Bombay.

2. Describe the changes which occur in a serous and mucous membrane, when inflamed.

3. Describe the form of dysentery which is most prevalent in Bombay, in the months of November, December, and January, and contrast it with that which most common in the hot months.

JOHN PEET,
Acting Professor of Medicine.

4TH YEAR STUDENTS.

Midwifery.

1. Give a description of the human ovary, as to situation, connections, and anatomical structure. Mention the contents of a Graafian vesicle before and after bursting, and state the connection between the ovaries and some important functions.

2. What are the indications for the use of the short-midwifery forceps, during labour, and state how such instruments are to be applied, and used ?

3. What are the causes, varieties, and consequences of rupture of the perineum ; when does it generally take place ; and how is it to be prevented and treated ?

W. C. COLES, M.D.,
Professor of Midwifery.

24th March 1855.

Medical Jurisprudence.

1. The characters (chemical and microscopical) by which blood-stains may be recognised, and the means of distinguishing such stains from marks of iron-rust, and the colour from red dyes ?

2. The method of using the hydrostatic test in cases of infanticide ; the inferences to be drawn from it ; the objections which have been urged against its conclusiveness ; and your estimate of its value ?

3. Symptoms and morbid appearances caused by narcotic poisons ; diseases with which they are most liable to be confounded ; and the criterions by which they may be distinguished from each other ?

W. CAMPBELL, M.D.,
Professor of Medical Jurisprudence.

24th March 1855.

APPENDIX U.

Result of Examination of 1st Year Students, Session 1854-55.

No.	NAMES.	Anatomy.	Chemistry.	Total.*	REMARKS.
1	Edujeee Nesserwanjee	1	1	2	
2	Manockjee Aderjee.....	2	3	5	
3	Ramchundra Narayan	3	2	5	
4	Burjorjee Framjee	2	4	6	
5	Pestonjee Bomanjee	3	3	6	
6	Pestonjee Muncherjee	3	4	7	
7	Jejeebhoy Bazunjee	4	5	9	
	Anundrao Wasoodave.....	6	8	14	
	Hurry Vishnoo	8	7	15	

Result of Examination of 2nd Year Students, Session 1854-55.

No.	NAMES.	Anatomy.	Physiology.	Chemistry.	Materia Medica.	Botany.	Practical Chemistry & Pharmacy.	Total.*	REMARKS.
1	Jumnadas Hurgovindas	2	2	1	1	2	1	8	
2	Bhicajee Amroot	3	1	2	2	1	..	9	
3	A. P. D'Andrade	1	3	4	3	3	..	14	
4	Rustomjee Cowasjee ..	4	5	3	4	5	..	21	
	Wamon Wasoodave ..	5	4	5	3	4	..	21	

* The lowest number marks the greatest merit.

JOHN PEET, Acting Principal, Grant Medical College.

Result of Examination of 3rd Year Students, Session 1854-55.

No.	NAMES.	Medicine.	Surgery.	Total.*	REMARKS.
1	Cursetjee Framjee	1	1	2	
2	Cowasjee Nowrojee	2	2	4	
3	Bazunjee Rustomjee	3	3	6	

Result of Examination of 4th Year Students, Session 1854-55.

No.	NAMES.	Medicine.	Surgery.	Midwifery.	Medical Jurisprudence.	Ophthalmic Surgery.	Total.*	REMARKS#
1	A. M. Continho.....	1	1	1	1	1	5	
2	Burjorjee Ardaseer....	1	1	2	2	2	8	
3	Cooverjee Dorabjee....	2	2	3	3	3	13	
4	Deerajram Dulpuram..	3	3	4	4	4	18	
5	A. De Souza	4	4	4	5	5	22	

* The lowest number marks the greatest merit.

JOHN PEET, Acting Principal, Grant Medical College.*

APPENDIX V.

REPORT TO THE MEDICAL BOARD.

SIR,

I have the honour to report, for the information of the Medical Board, that Mr. T. Frost presented himself for examination on the 12th instant, before the Acting Principal and Professors of the Grant Medical College.

The result of the examination is recorded in the annexed Statement.

I have the honour to be, Sir,
Your most obedient Servant,

JOHN PEET,
Acting Principal, Grant Medical College.

Bombay, Grant Medical College, 14th June 1854.

TO F. MANISTY, Esq.,
Secretary, Medical Board.

*Result of the Examination of a Warrant Medical Officer, at a Special Examination, held on the
12th June 1854.*

NAME.	Anatomy.	Physiology.	Materia Medica.	Chemistry.	Medicine.	Surgery.	Midwifery.	Medical Jurisprudence	REMARKS.
T. Frost	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.

JOHN PEET,
Acting Principal, Grant Medical College.

APPENDIX W.

REPORT TO THE MEDICAL BOARD.

SIR,

I have the honour to report, for the information of the Medical Board, the Result of the Examinations for the year 1854-55, held by the Acting Principal and Professors of the Grant Medical College, in accordance with the 25th and 35th Articles of the Rules relative to the Subordinate Medical Department, dated 2nd April 1851.

2. The following 3rd Year Student-Apprentices presented themselves for examination :—

H. Washington.

S. Cavanagh.

F. Pinto.

C. Stephens.

D. O'Neil.

The result of the Examination is recorded in the annexed Tabular Statement marked I.

The appearance made by the two first-named, in all the subjects, was highly creditable to them. The Burnes Medal, presented by the Masonic Brethren of Bombay, was awarded to H. Washington.

With reference to the unsuccessful Student-Apprentices at this Examination, I beg to bring to the notice of the Medical Board that F. Pinto has, during the period he has been attached to the Hospital, conducted himself with the greatest propriety; and although not at present possessing the qualifications necessary for promotion to the rank of Assistant

Apothecary, is nevertheless well fitted for employment as a Hospital Assistant.

3. The following Stewards and Assistant Apothecaries presented themselves for examination :—

Mr. A. Pollard,	} Stewards.
Mr. D. Munday,	
Mr. W. Panton,	
M. J. J. Almeida,	} Assistant Apothecaries.
Mr. E. Carpenter,	

The result of this Examination is recorded in the Tabular Statement marked II.

The amount of information possessed by Mr. Pollard, the first on the list, was such as to afford much satisfaction to the Examiners.

Mr. E. Carpenter, Assistant Apothecary, who has been already reported qualified in Anatomy, Physiology, Materia Medica, Chemistry, Medicine, and Surgery, has this year passed an examination in Midwifery and Medical Jurisprudence, and will receive the Certificate of Qualification.

4. The 2nd Year Student-Apprentices were examined for qualification in the more elementary subjects. The result of this examination is recorded in the annexed Table III. They were also examined to test their progress in Medicine and Surgery, as shown in Table IV.

5. With reference to Table V., containing the results of the Examination of the 1st Year Student-Apprentices, it is my duty to bring to the notice of the Medical Board, that the appearance made by J. Tearnan and R. Cox was very discreditable. These youths have during the Session been careless, idle, and untrustworthy. I beg to recommend that they be removed from this Institution, in order that the influence of a bad example may not be permitted to operate upon their fellow Apprentices. If the Medical Board concur in this recommendation, I would respectfully suggest, that as these youths are younger than some of the other Apprentices, they may be permitted to re-enter the College at the expiration of a year, provided that their conduct

during this period should be such as to entitle them to this indulgence.

6. In concluding this Report, I regret to have to state that the conduct of the Student-Apprentices, as a body, has not during the Session been characterized by that propriety and regularity which young men in their position should feel a pride in exhibiting. There are, indeed, many amongst them, whose propriety of demeanour and attention to their studies have been very praiseworthy ; but at the same time, I do not think they have always shown that interest in restraining their younger fellow Apprentices from the commission of acts of imprudence which, from their age and respectability, might have been anticipated.

I have the honour to be, Sir,
Your most obedient Servant,

JOHN PEET,
Acting Principal, Grant Medical College.

Bombay, 12th April 1855.

To F. MANISTY, Esq.,
Secretary, Medical Board.

I.

Result of Examination of 3rd Year Student-Apprentices, Session 1854-55.

No.	NAMES.	Ana- tomy.	Opera- tive Surgery.	Physio- logy.	Materia Medica.	Chemis- try.	Medicine.	Surgery.	Mid- wifery.	Medical Jurispru- dence.	Ophthal- mic Sur- gery.	Practical Anatomy.	Practical Che- mistry.	REMARKS.
1	H. Washington	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qualified.
2	S. Coughlin	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qual.	Qualified.
3	F. Pinto	Not qu.	Qual.	Qual.	Qual.	Not qu.	Qual.	Not qu.	Not qu.	Qual.	Not qual.	Qual.	Qual.	Not qualified.
4	C. Stephens	Not qu.	Qual.	Not qu.	Not qu.	Not qu.	Qual.	Not qu.	Not qu.	Not qual.	Not qual.	Qual.	Qual.	Not qualified.
5	D. O'Neil	Not qu.	Qual.	Not qu.	Not qu.	Not qu.	Not qu.	Not qu.	Not qu.	Not qual.	Not qual.	Qual.	Qual.	Not qualified.

II.

Result of Examination of Hospital Stewards and Assistant Apothecaries, Session 1854-55.

Rank.	NAMES.	Anatomy.	Physiology.	Materia Medica.	Chemistry.	Medicine.	Surgery.	Midwifery.	Medical Jurispru- dence.	REMARKS.
Steward	A. Pollard	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
Steward	W. Mundy	Not qualified.	Not qualified.	Absent.	Absent.	Absent.	Absent.	Absent.	Absent.	Qualified.
Steward	W. Panton	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Absent.
Asst. Apothecary.	J. J. Almeida	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.

JOHN PEET,

Acting Principal, Grant Medical College.

III.

Result of Examination of 2nd Year Student-Apprentices, Session 1854-55.

No.	NAMES.	Anatomy.	Physiology.	Chemistry.	Materia Medica.	Practical Anatomy.	Practical Chemistry.	REMARKS.
1	J. Kinlock	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
2	J. Silvester	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
3	Pandoo Chówan	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
4	Ellapah Lingoo	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
5	W. Wilson	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
6	R. L. McLean	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.
7	J. Neil	Not qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Qualified.	Not qualified
8	J. H. Bedford	Qualified.	Not qualified.	Not qualified.	Not qualified.	Qualified.	Qualified.	Not qualified.
9	E. McGeoch	Not qualified.	Qualified.	Not qualified.	Qualified.	Not qualified.	Qualified.	Not qualified.

JOHN PEET,
Acting Principal, Grant Medical College.

IV.

Result of Examination of 2nd Year Student-Apprentices, Session 1854-55.

No.	NAMES.	Medicine.	Surgery.	Total.*	REMARKS.
1	J. Kinlock.....	1	1	2	
2	J. Silvester.....	1	1	2	
3	R. L. McLean.....	2	2	4	
4	Pandoo Chowan.....	3	2	5	
5	Ellapah Lingoo.....	3	2	5	
6	W. Wilson.....	4	3	7	
7	J. Neil.....	4	3	7	
8	J. H. Bedford.....	5	4	9	
9	E. McGeoch.....	6	6	12	

* The lowest number marks the greatest merit.

JOHN PEET, Acting Principal, Grant Medical College.

V.

Result of Examination of 1st Year Student-Apprentices, Session 1854-55.

No.	NAMES.	Anatomy.	Chemistry.	Materia Medica.	Total.*	REMARKS.
1	J. C. Shaw	1	1	1	3	
2	Shaik Cassim	2	1	2	5	
3	Wisram Ramjee	2	2	3	7	
4	Mahadoo Joglakur	4	3	5	12	
5	W. Wright	3	6	4	13	
6	R. Rotchell	6	5	5	16	
7	J. Edmond	5	7	5	17	
8	P. Smith	6	4	7	17	
9	J. Tear	8	4	8	20	} Very ignorant.
10	R. Cox	7	8	6	21	

* The lowest number marks the greatest merit.

JOHN PEET,
Acting Principal, Grant Medical College,

APPENDIX X.

GRANT MEDICAL COLLEGE.

NOTIFICATION.

The WILLOUGHBY MEDICAL PRIZE, of Rs. 300, to be awarded, in the first week of April 1855, to that Graduate of the Grant College who presents the best Report of Medical and Surgical Practice.

The Report is to be drawn up exclusively from cases of Medical and Surgical Disease treated by the Author, subsequent to the date of his Graduation. It should be in every respect practical. The statement of the phenomena of the cases of disease treated of in the Report must be clear and succinct, must embrace a concise inquiry into the causes, and the best means of prevention, and offer an explanation of the indications observed in the treatment, the means by which it was attempted to fulfil these, and the success with which they were attended.

It is desirable that the Reports should not be in the handwriting of the Authors. They are to be transmitted to the Secretary to the Board of Education, so as to reach his Office on or before the 15th of March 1855.

Each Report is to be accompanied by a sealed note, containing the name of the Author, and subscribed with a Motto similar to one affixed to the Report.

The Prize will be awarded in accordance with the decision of a Committee, to consist of the Government Examiner, the Secretary to the Board of Education, the Principal of the Grant College, and the Professors of Medicine and Surgery. In the event of an equality of votes, the decision will rest with the Government Examiner.

By order of the Board of Education,

M. STOVELL,

Secretary.

Board of Education, Bombay, 24th October 1854.

APPENDIX Y.

No. 122 OF 1855.

Board of Education, Bombay, 13th February 1855.

SIR,

I am directed by the Board of Education to forward, for your information and guidance, copy of a communication from Government, No. 140, dated 13th ultimo, relative to the Burnes Medal for the Grant Medical College.

2. The Medal alluded to in paragraph 2 of the Government letter is herewith forwarded.

I have the honour to be, &c.

(Signed) M. STOVELL,
Secretary.

To J. PEET, Esq.,

Acting Principal, Grant Medical College.

No. 140 OF 1855.

GENERAL DEPARTMENT.

To the SECRETARY TO THE BOARD OF EDUCATION.

SIR,

I am directed by the Right Honorable the Governor in Council to transmit to you copy of a letter from P. W. LeGeyt, Esq., dated the 4th March 1852, and to intimate that the request therein preferred having been submitted for the favourable consideration of the Honorable the Court of Directors, that Autho-

city has given orders for the annual transmission of the Medal founded in the Grant Medical College in honour of Dr. Burnes.

2. I am desired, with reference to paragraph 3 of Mr. Le-Geyt's communication, to forward to you the accompanying Medal received from the Honorable Court, for transmission to the Grant Medical College.

I have the honour to be, &c.

(Signed) W. HART,
Secretary to Government.

Bombay Castle, 13th January 1855.

To J. G. LUMSDEN, Esq.,
Secretary to Government.

SIR,

At the Masonic Meeting which took place in Bombay, on the 15th November 1849, and at which were present a very large number of Masons, the following Resolutions (with others, to which it is unnecessary here to allude) were unanimously adopted, with the view to do honour to Dr. James Burnes, on the occasion of his resigning the office of Provincial Grand Master of Western India, consequent on his retirement from the Public Service, and return to Europe:—

“That, as a token to all men and Brethren, both here and in our native land, of the affection, gratitude, and regard we entertain towards our Right Worshipful Brother James Burnes, and of the appreciation in which we hold his brilliant achievements in the cause of charity and love to all men, four Medals be founded by us, for the encouragement of good conduct and learning in youth, to be awarded yearly to the most accomplished pupils in the following Schools:—

“1st.—At the Grant Medical College, Bombay, to the best Student-Apprentice, as recommended by the Board of Education.

“2nd.—At the Schools of the Bombay Education Society at Byculla, to the best pupils in the Boys' and Girls' School (one Medal each), as nominated by the Committee of Management.

"3rd.—At the Academy at Montrose, in Scotland, where the Right Worshipful Brother Burnes himself was educated, to the best boy nominated by the Right Worshipful Brother himself, his heirs, or successors. That the following Brethren be appointed a Committee, to give effect to these Resolutions, and that a Deputation wait upon the Right Worshipful Brother Burnes to communicate the same to him :—

" Brother P. W. LeGeyt.

" W. Crawford.

" H. Barr.

" J. Mullaly.

" W. Blowers.*

" J. W. Winchester.

" W. C. Allen.

" M. F. Willoughby.

" G. Jenkins.

" W. Wellis.

" H. Forman.

" Manockjee Cursetjee.

" And all Masters of Lodges in Western India."

2. The necessary measures for the perpetual endowment of the Medals having been completed, the Committee are anxious to guard against any contingency which might hereafter affect the receipt and presentation of those intended for the Grant College, and Byculla Schools, by arranging for their regular transmission annually to Bombay through a medium which cannot fail, and which will in no way be dependent on the existence of any Institution, or association of individuals.

3. On behalf of the Committee, I have therefore the honour to request that His Lordship in Council will be pleased to obtain the permission of the Honorable the Court of Directors for the Medals being forwarded through the India House to the Government here, for delivery to the Grant Medical College, and to the Education Society's Schools at Byculla. A small packet, containing the Medals, will be yearly sent to the India House by

* "Corresponding Member."

Mr. B. Wyon (Medallist to Her Majesty the Queen), or other authorised person, in time for transmission with the Despatches which leave London in the month of November, so as to ensure their arrival here in time for the Examinations, which take place in January and April following.

I have the honour to be, &c.

(Signed) P. W. LEGEY, T,

Chairman of the Committee,

And Provincial Grand Master of Western India.

Bombay, 4th March 1852.

(True copy)

(Signed) W. HART,

Secretary to Government.

(True copy)

(Signed) M. STOVELL,

Secretary.

APPENDIX Z.

GRANT MEDICAL COLLEGE, BOMBAY.

PRINCIPAL, C. Morehead, M.D.

PROFESSORS.

Anatomy and Physiology.—G. R. Ballingall, M.D. Edin.,
M.R.C.S. Edin.

Chemistry.—H. Giraud, M.D. Edin., M.R.C.S. Lond.

Materia Medica and Pharmacy.—R. Haines, M.B. Lond.,
M.R.C.S. Lond.

Medicine, the Principles and Practice of, and Clinical Medi-
cine.—C. Morehead, M.D. Edin., M.R.C.S. Edin.

Surgery, the Principles and Practice of, and Clinical Surgery.—
J. Peet, M.R.C.S. Lond. ●

Midwifery, the Principles and Practice of, and Clinical Mid-
wifery.—W. C. Coles, M.D. Edin., M.R.C.S. Lond.

Medical Jurisprudence.—W. Campbell, M.D. Glas., M.R.C.S.
Edin.

Ophthalmic Surgery.—H. J. Carter, M.R.C.S. Lond.

Botany.—H. Giraud, M.D. Edin., M.R.C.S. Lond.

The College, which was established in 1845, is under the im-
mediate management of a Principal, subject to the control of the
Board of Education and the Government of Bombay. The
Session extends from the 15th of June to the 15th of April,
The first nine months are devoted to instruction, and the tenth
month is occupied with Diploma and Scholarship Examinations.

Anatomy and Physiology.—The course consists of 144 lectures, and 50 examinations. The regular dissecting season is from the 1st of November to the 15th of March ; and the supply of subjects for dissection is abundant.

Chemistry.—There are 72 lectures, 36 examinations, and 36 days of practical instruction in the Laboratory.

Materia Medica and Pharmacy.—The course consists of 72 lectures, illustrated by a good collection of articles of the *Materia Medica*, and 36 examinations. Practical Pharmacy is taught in the Hospital.

Medicine.—There are 108 lectures on the Principles and Practice, 36 examinations, and 36 lectures on Clinical Medicine, in the College. For nine months daily instruction, of an hour's duration, is given in the Clinical Wards of the Hospital.

Surgery.—There are 100 lectures on the Principles and Practice, 36 examinations, and 36 lectures on Clinical Surgery, in the College. For nine months daily instruction, of an hour's duration, is given in the Clinical Wards of the Hospital, and Operative Surgery is taught twice a week during the first half of the Session in the Dissecting-room.

Midwifery.—There are 65 lectures on the Principles and Practice, (including diseases of women and children,) 30 examinations, and Clinical instruction is afforded in the Lying-in Hospital and Female Dispensary.

Medical Jurisprudence.—The course consists of 50 lectures, 25 examinations, and 20 days of practical instruction in Toxicology in the Laboratory.

Ophthalmic Surgery.—There are 25 lectures, 12 examinations, and daily instruction is given for nine months in the Eye Dispensary.

Botany.—The course consists of 25 lectures and 12 examinations, on Structural and Physiological Botany.

Clinical Instruction.—The means are ample. There are the “Jamsetjee Jejeebhoy Hospital,” adjoining the College,—containing 300 beds, 240 for males and 60 for females—annual admissions upwards of 4,500,—and a Lying-in Hospital adjacent,

containing 25 beds. There are connected with the Hospital a Dispensary for Male out-patients, at which upwards of 9,000 are treated annually, and a Dispensary for Females and Children, at which about 5,000 are treated annually. The Medical Officers of the Hospital and Dispensaries are the Professors of Medicine, Surgery, Midwifery, Materia Medica, Chemistry, and Anatomy. There is adjoining the Hospital an Eye Dispensary, attended by the Professor of Ophthalmic Surgery, at which about 1,000 patients are annually treated. There is also the Government Office for Vaccination, under the same roof with the Eye and Female Dispensaries, superintended by the Professor of Surgery.

CURRICULUM OF STUDY.

The Curriculum of Study in the College is as follows, extending over five years (the course may be gone through in four years, but this is not encouraged, and there has never been an instance of it) :—

Anatomy and Physiology.—Three course of lectures on Anatomy, two courses on Physiology ; and Dissections during three Sessions.

Chemistry.—Two courses of lectures on Chemistry, and two courses of Practical Chemistry.

Materia Medica and Pharmacy.—Two courses of lectures on Materia Medica, and two years' compounding and dispensing Medicine in the Hospital.

Medicine.—Three courses of lectures on the Principles and Practice of Medicine, three courses of Clinical Medicine ; and each Student in rotation officiates as Clinical Clerk for at least nine months.

Surgery.—Three courses of lectures on the Principles and Practice of Surgery, three courses of Clinical Surgery ; and each Student in rotation officiates as Surgical Dresser for at least nine months.

Midwifery.—Two courses of lectures upon the Principles and Practice of Midwifery and Diseases of Women and Children, and attendance in the Lying-in Hospital and at the Female Dispensary.

Medical Jurisprudence.—Two courses of lectures, and instruction in Practical Toxicology.

Ophthalmic Surgery.—Two courses of lectures, and attendance at the Eye Dispensary.

Botany.—Two courses of lectures.

EXAMINATIONS FOR THE DIPLOMA OF GRADUATE OF THE GRANT MEDICAL COLLEGE.

The Examinations in Anatomy, Physiology, Chemistry, Materia Medica, and Botany, are conducted by the Professors of the College; but in Medicine, Surgery, Midwifery, and Medical Jurisprudence, the Examinations are undertaken by an Examiner and three Assessors specially appointed by the Government of Bombay.

The Examinations in Medicine and Surgery are in part conducted in the Clinical Wards of the Hospital, and are continued for about a month. The Examinations in Operative Surgery and Anatomy, in part, take place in the Dissecting-room.

(Signed) C. MOREHEAD, M.D.,
Principal, Grant Medical College.

Bombay, 1st May 1854.

(Signed) M. STOVELL,
Secretary, Board of Education.

GENERAL DEPARTMENT.

The Right Honorable the Governor in Council is pleased to publish for general information the following Despatch from the Honorable the Court of Directors, and its accompaniments:—

PUBLIC DEPARTMENT.

No. 57 OF 1854.

Our Governor in Council at Bombay.

We have much satisfaction in transmitting to you the accompanying copy of a letter from the Secretary to the Royal College

* of Surgeons, announcing the resolution of the Court of Examiners to place the Grant Medical College at Bombay on the list of Colonial Colleges and Schools recognized by the Royal College of Surgeons.

We are, &c.

(Signed) J. OLIPHANT,
 „ E. MACNAGHTEN,
 And other Directors.

London, 20th December 1854.

ROYAL COLLEGE OF SURGEONS OF ENGLAND,
 23rd November 1854.

SIR,—In reply to your letter dated the 8th of August last, upon the question of the recognition by this College of the Grant Medical College at Bombay as a School of Medicine and Surgery, I am desirous to acquaint you that the Court of Examiners of this College, having taken the subject into further consideration, have resolved that the Grant Medical College at Bombay be added to the List of Colonial Hospitals and Schools recognized by this College; and that accordingly Certificates of attendance upon the Hospital Practice thereof, and of attendance upon the Lectures of the several Professors in the Medical School of the said College, will be received, upon the conditions of the enclosed Regulations relating to Colonial Hospitals and Schools.

I am, Sir,
 Your most obedient Servant,
 (Signed) EDMUND BELFOUR,
 Secretary.

SIR JAMES C. MELVILL, K.C.B.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Regulations of the Council respecting the Professional Education of Candidates for the Diploma of Member of the College.

I. Candidates will be required to produce the following Certificates, viz :—

1. Of being twenty-one years of age.

2. Of having been engaged during four years in the acquirement of professional knowledge.
3. Of having studied Practical Pharmacy during six months.
4. Of having studied Anatomy and Physiology, by attendance on Lectures and Demonstrations, and by Dissections, during three Winter Sessions.
5. Of having attended, during two Winter Sessions, Lectures on the Principles and Practice of Surgery.
6. Of having attended, during one Summer Session, Lectures on Materia Medica, and Lectures on Midwifery ; Practical Midwifery to be attended at any time after the conclusion of the Session.
7. Of having attended at least one Course of Lectures on the Practice of Physic, and one Course on Chemistry.
8. Of having attended at a recognised Hospital or Hospitals in the United Kingdom the Practice of Physic during one Winter* and one Summer† Session.
9. And of having attended, during three Winter and two Summer Sessions, the Practice of Surgery at a recognized Hospital or Hospitals in the United Kingdom.
10. And of having attended Clinical Lectures on Medicine and Surgery in conformity with the following Regulations of the Council :—

The Certificates of attendance on the Medical Practice of a Hospital, commencing on or after the 1st of October 1854, must be accompanied by Certificates of attendance on Clinical Lectures on Medicine during such attendance:—and the Certificates of attendance on the Surgical Practice of a Hos-

* The Winter Session comprises a period of six months, and, in England, commences on the 1st of October and terminates on the 31st of March.

† The Summer Session comprises a period of three months, and, in England, commences on the 1st of May and terminates on the 31st of July.

- No Provincial Hospital will be recognised by this College which contains less than 100 Patients, and no Metropolitan Hospital which contains less than 150 Patients.

pital, commencing on or after the said 1st of October 1854, must be accompanied by Certificates of attendance on Clinical Lectures on Surgery during such attendance.

Such Courses of Clinical Lectures shall, in England and in the Colonies, consist of not less than one Lecture on Medicine and one Lecture on Surgery in each week during the Summer and Winter Sessions; and in Scotland and Ireland shall consist of such number of Lectures as may be respectively required by the Royal Colleges of Surgeons of Edinburgh and Ireland.

These Lectures shall be additional to Clinical Instruction given in the Wards, and shall have especial reference to cases at the time, or previously under observation in the Hospital.

The course of study hereby prescribed is required to be observed by Candidates who shall have pursued their studies in Hospitals and Schools in England. Those Candidates who shall have studied in Scotland are required to bring Certificates of having attended Lectures on the Institutes of Medicine during one Winter Session, and on Anatomy during two other Winter Sessions, and on Demonstrations and Dissections during three Winter Sessions (the foregoing Regulations being in all other respects observed). Candidates who shall have attended Lectures on Materia Medica in the University of Dublin will be allowed to bring Certificates of such attendance during the Winter Session.

II. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, and Graduates in Surgery of any University requiring residence to obtain Degrees, will be admitted for examination on producing their Diploma, Licence, or Degree, together with proof of being twenty-one years of age, and of having been occupied at least four years in the acquirement of professional knowledge.

III. Graduates in Medicine, of any legally constituted College or University requiring residence to obtain Degrees, will be admitted for examination on adducing, together with their Diploma, or Degree, proof of having completed the Anatomical and Surgical Education required by the foregoing Regulations, either

at the School and Hospital of the University where they shall have graduated, or at one or more of the recognized Schools and Hospitals in the United Kingdom.

IV. Candidates who shall have attended, at recognised Colonial Hospitals and Schools,* the Medical and Surgical Practice and the several Courses of Lectures, with the Demonstrations and Dissections required by the foregoing Regulations, will be admitted for examination upon producing Certificates of such attendance, together with Certificates of having attended in London, during one Winter Session, the Surgical Practice of a recognized Hospital, and Lectures on Anatomy, Physiology, and Surgery, with Demonstrations and Dissections.

V. Certificates will not be recognised from any Hospital, unless the Surgeons thereto be Members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the Teachers in such School be Members of some legally constituted College of Physicians or Surgeons in the United Kingdom, nor from any School of Surgery, unless the Teachers in such School be Members of one of the legally constituted Colleges of Surgeons in the United Kingdom.

VI. Certificates will not be received on more than one branch of Science from one and the same Lecturer: but Anatomy and Physiology—Demonstrations and Dissections—will be respectively considered as one branch of science; and in those Schools in Scotland or Ireland in which such division of those subjects is sanctioned by the College of Surgeons in each Kingdom, the Institutes of Medicine,—Anatomy, Demonstrations, and Dissections,—may be separately certified.

VII. Certificates will not be received from Candidates who have studied in London, unless they shall have registered their Tickets at the College, as required by the Regulations, during the last ten days of January, March, and October, in each year;

* The recognition of Colonial Hospitals and Schools is governed by the same Regulations with respect to number of Patients, to Courses of Lectures, and to Physicians, Surgeons, and Lecturers, as apply to the recognition of Provincial Hospitals and Schools in England.

nor from Candidates who have studied elsewhere, unless their names shall duly appear in the Registers transmitted during such studies from their respective Schools.

By order of the Council,
(Signed) EDMOND BELFOUR,
Secretary.

N. B.—In the Certificates of attendance on Hospital Practice and on Lectures, it is required that the dates of commencement and termination be clearly expressed ; and no interlineation, erasure, or alteration will be allowed.

Blank Forms of the required Certificates may be obtained on application to the Secretary, to whom they must be delivered, properly filled up, ten days before the Candidate can be admitted to examination ; and all such Certificates are retained at the College.

By order of the Right Honorable the Governor in Council,
(Signed) W. HART,
Secretary to Government.

Bombay Castle, 31st January 1855.

APPENDIX AA.

REGULATIONS OF THE GRANT MEDICAL COLLEGE.

The following Rules for the Grant Medical College have been approved by the Right Honorable the Governor in Council, and are published for general information, in supersession of those now in force at that Institution :—

I. The Grant Medical College was instituted with the object of imparting to the Natives of Western India, through a scientific system, the benefits of Medical education.

II. The College is under the control of the Board of Education.

Management and Course of Study. III. The system of education, and the details of management, are regulated by the Principal of the College, subject to the control of the Board of Education.

IV. Instruction in the following subjects,

Anatomy and Physiology,
Chemistry,
Materia Medica and Pharmacy,
Botany,
Medicine,
Surgery,
Midwifery,
Medical Jurisprudence,
Ophthalmic Surgery,

is conducted in the English language, by eight Professors.

V. The following is the order of Study :—

SUBJECTS.	The Period and Order of Attendance by Students.
Anatomy	Lectures and Dissections 1st, 2nd, and 3rd years.
Chemistry	Theoretical and Practical 1st, 2nd, and 3rd years.
Physiology and General Anatomy	2nd and 3rd years.
Materia Medica and Pharmacy	2nd and 3rd years.
Botany	2nd and 3rd years.
Principles and Practice of Medicine	3rd, 4th, and 5th years.
Surgery	3rd, 4th, and 5th years.
Clinical Medicine	3rd, 4th, and 5th years.
Clinical Surgery	3rd, 4th, and 5th years.
Midwifery	4th and 5th years.
Clinical Midwifery	4th and 5th years.
Medical Jurisprudence	4th and 5th years.
Ophthalmic Surgery	4th and 5th years.

The Session commences on the 15th of June,* and terminates on the 15th of April. Lectures are delivered from the 15th June to the 15th March, and the various Examinations are conducted in the last month of the Session.

Admission of Students. VI. The requisites of Candidates for admission into the College are—

1. Age from 16 to 20.
2. A Certificate of character from some person of acknowledged respectability.
3. A Certificate of good conduct from the Head Master of the School in which the Candidate has been educated, including a statement of the subjects in which he has received instruction.
4. A grammatical knowledge of his Vernacular language; ability to read, write, and speak the English language with accuracy and fluency; an acquaintance with the rules of Arithmetic; a knowledge of the elements of Algebra, Geometry, and Natural Philosophy; a general knowledge of the Geography and History of the four quarters of the Globe.

VII. The acquirements of Candidates for admission are tested by Examinations, held in the month of April of every year, by the Principal and Professors of the College. The subjects of examination are those stated under Art. 4 of Rule VI., and

particulars may be learnt on application to the Principal of the College.

VIII. Native Students, who really require the assistance of Government, may receive a Monthly Allowance of Rs. 8 during attendance in the College, provided the period does not exceed five years. The number of this class is limited to 25, and preference is given to the Candidates who, at the Examination for admission, evince the greatest proficiency. Those of this class who voluntarily leave the College before presenting themselves for final Examination, are required to refund the total amount which has been received by them.

IX. Students are required to study the Principles and Practice of Medicine, Surgery, Midwifery, and the collateral Sciences, in strict accordance with the principles followed in the best Medical Schools in Europe.

X. Students are required to prosecute their studies at the College for a period of not less than four years, before they are entitled to present themselves for Examination for the Diploma of Graduate; and Students who are unable to pass this Examination at the end of six years are no longer permitted to continue their attendance, or to present themselves again for examination, unless on very special reasons shown by the Principal, and concurred in by the Board of Education.

XI. The Students of the College are all examined at the close of each Session, and those of them who, at the end of their second Session, from idleness, want of ability, or other cause, evince a want of aptitude for learning, are required to withdraw from the College.

XII. The Board of Education exercises the right of dismissal of Students from the College, on just grounds being shown by the Principal.

XIII. The following are the Rules laid down for the examination of Candidates for the Diploma of Graduate :—

1. The subjects of examination are classed in two divisions—

(a) Anatomy, Physiology, Chemistry, Materia Medica, Pharmacy, and Botany; (b) Medicine, Surgery, Midwifery, and Medical Jurisprudence.

2. The examination in the subjects of division (a) is called "First Examination"; the examination in the subjects of division (b) is called "Final Examination."
3. The "First Examination" is conducted by the Principal and Professors of the College; Students after the close of their third year of study may present themselves as Candidates.
4. The "First Examination" is conducted in the following manner:—

Anatomy.—By written question and answer, oral examination, and dissection.

Physiology.—Written question and answer, and oral examination.

Chemistry.—Written question and answer, oral examination, and practice in the Laboratory.

Materia Medica and Pharmacy.—Written question and answer, oral examination, and practice in the Laboratory.

Botany.—Oral examination, with illustrations, &c.

5. Students found qualified receive the following "Certificate," signed by the Principal of the College, and the Professors of Anatomy, Physiology, Chemistry, Materia Medica, and Botany:—

"GRANT MEDICAL COLLEGE.

"*First Examination Certificate*.

"We the undersigned, the Principal and Professors of the College, having carefully and fully examined of _____ in Anatomy, Physiology, Chemistry, Materia Medica, Pharmacy, and Botany, do hereby certify that he is possessed of full and accurate knowledge of these branches of Science."

6. Students who have completed the curriculum of study prescribed by the College, and who have obtained the "First

Examination" Certificate, are permitted to present themselves for "Final Examination."

7. The "Final Examination" is conducted by an Examiner with three Assessors appointed by Government, aided by the Principal and Professors of the College, in the following manner :—

Medicine.—By the Government Examiner and Assessors, and the Professor of Medicine, by written question and answer, oral examination, and practical exercises in the Clinical Ward.

Surgery.—By the Government Examiner and Assessors, and the Professor of Surgery, by written question and answer, and oral examination, Surgical Anatomy and operations in the Dissecting-room, and practical exercises in the Clinical Ward.

Midwifery.—By the Government Examiner and Assessors, and the Professor of Midwifery, by written question and answer, and oral examination, and practical exercises in the Obstetric Institution.

Medical Jurisprudence.—By the Government Examiner and Assessors, and the Professor of Medical Jurisprudence, by written question and answer, and oral examination, and practical exercises in the Laboratory.

8. The Government Examiner is the President, and has the privilege of a casting vote, should its exercise be necessary. The Assessors and the Professors have each a vote. The Principal of the College has the privilege of attending the examination on each subject, and of voting.

9. Students found qualified at the "Final Examination" receive the following Diploma (expressed in the English, Marathi, Guzerati, and Hindoostani languages) of Graduate of the Grant Medical College, signed by the Government Examiner and Assessors, the Principal and the Professors of the College, and countersigned by the President of the Board of Education, and Secretary to the Government of Bombay.

" GRANT MEDICAL COLLEGE, BOMBAY.

" *Opened A. D. 1845.*

" Be it known to all, that we, whose names are hereto attached, having duly considered the Certificate of full and accurate knowledge in Anatomy, Physiology, Chemistry, Materia Medica, Pharmacy, and Botany, as well as the Certificate of diligence and good conduct in College possessed by of and duly executed by the Principal and Professors of the College, have fully and carefully examined in Medicine, Surgery, Midwifery, and Medical Jurisprudence, and have found him fit and capable to exercise these Arts and Sciences.

" We therefore admit him a Graduate of this College, and grant this Certificate of his ability to practise Medicine, Surgery, and Midwifery."

XIV. In the event, however, of its coming at a subsequent period to the knowledge of the Board of Education, and being proved to their satisfaction, that any individual possessing the Certificate of Qualification to practise Medicine and Surgery has exhibited marked proofs of professional ignorance, or been guilty of flagrant moral delinquency, it will be competent to the Board of Education to recommend to Government to direct that the name of such individual be erased from the list of qualified Licentiates of the College, and a Notification of his degradation will be published in the Government Gazette.

XV. The Carnac, Farish, Anderson, and Reid Scholarship Funds yield an Annual Income of Rs. 2,582, and the Sir Jamsetjee Jeejeebhoy Medical Prize Fund Rs. 250. The Scholarships range in value from Rs. 25 to Rs. 10, monthly, and are notified for competition in the early part of each Session, subject to the following condition :—

1. The award of the Scholarships is determined partly by the results of the Examinations held at the close of the Session, but in a great measure also from the estimate formed, during

the Session, of the industry, assiduity, proficiency, and propriety of demeanour of the competitors.

2. The Scholarships are held for a period of one year.
3. A minimum standard of proficiency is fixed on, and should this standard not be exceeded, the Scholarships ~~are~~ not awarded.
4. In the event of a Student being the successful competitor for more than one Scholarship, he, in addition to the award of one Scholarship, receives some honorary mark of distinction, but the second Scholarship passes down to the proficient in the next degree.
5. In the event of other Prizes being awarded to the successful competitor for a Scholarship, he receives the Prize in addition to the Scholarship.
6. The presence of the Students in the College and Hospital is ascertained by roll-call at least four times daily, throughout the Session, and those Students who, during the Session, have been absent for more than fifteen roll-calls, exclusive of absence on recognised holidays, from sickness (duly certified), and leave granted on unavoidable grounds, are not permitted to compete for these Scholarships.
7. Those Students whose English exercises, written during the Session, show a marked want of attention to improvement in composition, are also debarred from competing for the Scholarships.
8. Should the written exercise required as part of the examination for the Scholarships show a marked want of attention to improvement in English composition, the writer is held to be disqualified for a Scholarship, whatever his qualifications in other respects may be.
9. The successful competitors are required to show, by the result of the General Examination at the close of the Session, that they have not neglected any of the branches of study with which they may have been engaged during their attendance in the College : deficiency in this respect disqualifies for the Scholarships.

XVI. The Sir Jamsetjee Jejeebhoy Medical Book Fund
 yields an annual income of Rs. (500)
 Book Fund. five hundred, which is distributed to the
 Students of the College, to assist in defraying the cost of the text-
 books with which they are required to provide themselves.

XVII. With the view of advancing the objects for which the
 College was instituted, the appointment
 Sub-Assistant Surgeons of Sub-Assistant Surgeons to the Me-
 —Rules relative to. dical Establishment of the Bombay Pre-
 sidency has been sanctioned, subject to the following Rules :—

1. Sub-Assistant Surgeons are to be selected exclusively from the most meritorious and highly qualified Graduates of the Grant Medical College.
2. Sub-Assistant Surgeons will be arranged in three Classes, —First, Second, and Third,—the last being the lowest of the three.
3. The following scale of Allowances is fixed for the three Classes of Sub-Assistant Surgeons :—

3rd Class..	Rs. 100
2nd Class..	Rs. 150
1st Class..	Rs. 200

4. Sub-Assistant Surgeons, on appointment, will be entered in the 3rd Class, and after seven years' service in this Class will become eligible for promotion to the 2nd Class, and after seven years' service in this Class will become eligible for promotion to the 1st Class.
5. Sub-Assistant Surgeons of the 3rd and 2nd Classes, eligible by length of service for promotion to the superior grade, will, however, in no instance, be promoted till after re-examination by the Professors of the Grant College, in the practice of Medicine, Surgery, and Midwifery, conducted with the view of ascertaining whether the Sub-Assistant Surgeons continue possessed of proficiency in these practical subjects, and whether their knowledge has kept pace with the advances of Medical Science. In the event of a favourable report, the Sub-Assistant Surgeon will be entitled to

the increased rate of allowances from the date of completion of the septennial period ; in the event of an unfavourable report, the Sub-Assistant Surgeon will continue in the lower Class for another year, be then examined by the Professors of the College, and should he still be unfavourably reported on, the expediency of removing him from the list of Sub-Assistant Surgeons will be taken into consideration.

6. In the event of a Sub-Assistant Surgeon of the 3rd or 2nd Class distinguishing himself for a period of years by great assiduity in the discharge of his professional duties, and at the same time by making contributions to Medical Science, creditable to his industry and professional attainments, he will become eligible for promotion to the superior grade without reference to period of service ; but in no instance will the promotion take place till he has been examined in Medicine, Surgery, and Midwifery, and favourably reported on by the Professors of the Grant Medical College.
7. Sub-Assistant Surgeons at first will be chiefly employed in connection with Public Dispensaries and Civil Hospitals in the large towns in different parts of the Presidency ; and, like other Members of the Medical Establishment, will be subject to the control of the Medical Board and Superintending Surgeons, and will be guided by the Code of Regulations of the Department.
8. The rank of Sub-Assistant Surgeons will reckon from the date of appointment in Government Orders, but they will not be entitled to the salary of Rs. 100 till they have joined the Station, and entered upon the duties to which they have been nominated.
9. In official intercourse with Sub-Assistant Surgeons, it is the wish of Government that these public servants should be treated with the same degree of respect which is paid to Native Commissioned Officers of the Army, &c. and to the higher classes of Native Revenue and Judicial Officers, such as Mamlutdars, Sudder Ameens, &c. &c.
10. Sub-Assistant Surgeons proceeding for the first time

after appointment to join their Stations, will be entitled to Rs. 2 daily as Travelling Allowance for the regulated period, and to an advance of two months' Pay, the advance to be liquidated by deduction of Rs. 50 monthly.

11. A Sub-Assistant Surgeon appointed with the sanction of Government to the service of a Foreign State, or of a Jagheerdar, Chieftain, &c. &c. will receive an addition equal to one-third of his pay.
12. When the Medical charge of a Civil Station, or of a Subsidiary Jail, &c. &c. is entrusted to a Sub-Assistant Surgeon, he shall receive all Allowances in the form of Head Money sanctioned by the Regulations, and Rs. 50 per mensem additional salary.
13. Sub-Assistant Surgeons acting for Divisional Superintendents of Vaccination will receive Rs. 2 per diem Travelling Allowance, and Rs. 50 additional salary.
14. Sub-Assistant Surgeons falling into charge of a Native Regiment, or of a portion thereof, shall receive the regulated amount of Head Money ; but if directed to assume charge at another Station than that of the Dispensary to which they have been posted, they shall receive Rs. 2 daily as Travelling Allowance, for the regulated period, and during their residence at such Station Rs. 30 House-rent.*
15. Sub-Assistant Surgeons taking the Field with a Force, or marching with Troops, shall, in addition to Head Money, receive Rs. 60 a month Travelling Allowance, and Rs. 30 Tent Allowance.
16. Leave may be granted to a Sub-Assistant Surgeon, whether on private affairs or Medical Certificate, for one month during the year, free of deduction from his Allowances, provided no inconvenience is caused thereby, and his duties can be performed during his absence without putting Government to any extra expense.
17. When leave is granted on private affairs or on Medical certificate for a longer period than one month, the Sub-

* Vide Clause 20, Sect. XVIII. Medical Regulations.

Assistant Surgeon may draw full salary for the first month, on the conditions above-mentioned, but at the expiration of that period he will be subject to a deduction of one-half of his salary, which will be payable to the party appointed to act for him ; who, if he hold an appointment under Government, will forfeit a moiety of his own salary, unless he has to perform the duties of both situations.

18. Applications for leave of absence to be forwarded according to the Rules laid down in Sect. XVII. of the Medical Regulations.

19. The Honorable Court have ruled that Sub-Assistant Surgeons shall not at any time be admitted to the benefit of the Rules under which Pensions are granted to the Members of the Uncovenanted Service.

XVIII. The College is also available for the Instruction of
Instruction of Warrant Medical Officers and Apprentices. Warrant Medical Officers and Apprentices of the Public Service, subject to the Rules laid down by the Medical Board, and published in General Orders under date April 2nd 1851.

XIX. An Annual Report of the state of the College is submitted to the Board of Education, and published for general information.

By order of the Board of Education,

(Signed) M. STOVELL,

Secretary of the Board of Education.

Board of Education, Bombay, 31st May 1854.

(Signed) C. E. FRASER TYTLER,

Offg. Secretary to Government.

APPENDIX BB.

DONATIONS TO THE MUSEUM.

The following additions have been made to the Museum during the last year :—

From the Jamsetjee Jejeebhoy Hospital.

- 1, Trachea, showing scar from tracheotomy.
- 2, Heart, diseased valves, and hypertrophy.
- 3, Results of pericarditis.
- 4, Kidney, double ureter.
- 5, Fœtus.
- 6, Perforated intestine.
- 7, Diseased metacarpal bone.
- 8, Fracture of skull.
- 9, Calculus.
- 10, Caries of os calcis.

From Mr. Peet.

- 1, Calcified guinea-worm.
- 2, Mass of ditto.
- 3, Diseased cardiac valves.

From Dr. Ballingall.

- 1, Sac of hydrocele, lined with recent lymph.
- 2, Tumour of lower jaw.
- 3, Tumour of neck.
- 4, Diseased ovaries.
- 5, Urethral calculus.
- 6, Five specimens of calculi.

From Dr. W. C. Coles.

- 1, Skeleton of a horse.
- 2, Fœtus.
- 3, A diseased heart.

From Dr. Bowie.

- 1, Horse-shoe kidney.
- 2, Uterus after miscarriage.
- 3, Two diseased spleens.
- 4, Inflamed dura mater.
- 5, Caries of bones of foot.
- 6, Œdema of glottis.
- 7, Skeleton, showing leprous disease.

From Mr. Reynolds.

- 1, Scirrhus of pylorus.

From Mr Narrajen Dajee.

- 1, Phoorsa snake.

From Dr. H. Giraud.

- 1, Scirrhus tumour of the aorta.
- 2, large rock-snake.

From Dr. Buist.

- 1, Three specimens of cobra-de-capella.
- 2, One ditto ditto.

From Dr. Campbell.

- 1, Tumour of brain (scrofulous).

From Captain Henry.

- 1, Cobra in the act of swallowing another snake.

From Student-Apprentice P. Smith.

- 1, Hymenopterous insects.
- 2, Green snakes, various specimens.

From Superintending Surgeon Rooke.

- 1, Specimens of diseased colon.

From Dr. Thom, 1st Fusiliers

- 1, Valvular disease of heart.

- 2, Diseased liver (cirrhosis).
- 3, Granular kidneys.
- 4, Fatty and waxy liver.

Prepared by Mr. Vincent D'Souza.

- 1, Skeleton of owl.

From Dr. Mosgrove.

- 1, Tumour of labium.

From Dr. Turner, Horse Brigade.

- 1, Cavity from caries in head, of tibia.
- 2, Two preparations of fungus, hematodes.

From Dr. Carter.

- 1, Biliary calculus.

From Dr. Willocks, 78th Highlanders.

- 1, Monstrous calf, 2 heads and 5 legs.

From Dr. Beatty.

- 1, Portion of large intestine, obstructed.
- 2, Urinary bladder.

From Scinde.

- 1, Cobra, Scinde.
- 2, Ditto, ditto.
- 3, A large poisonous snake.
- 4, A small ditto.
- 5, A specimen of poisonous snake (Kupper).
- 6, Ditto ditto ditto.
- 7, Another specimen of cobra.
- 8, Ditto ditto.
- 9, A Korar snake.
- 10, A Goril snake.
- 11, A Kupper snake.
- 12, Diseased heart.
- 13, Sacculated aorta.
- 14, Cyst of carotid aneurism.
- 15, Organized fibrin from popliteal artery.

From Dr. Leith.

- 1, Male skeleton.

- 2, Female skeleton.
- 3, A padded pelvis and foetus.

From Dr. McKenzie, I. N.

- 1, Specimen of bones from ancient tombs in Mesopotamia.
- 2, Specimen of "Ostracian cubicus."

From Dr. Arbuckle.

- 1, Specimen of Myliobatis.

Prepared by Mr. Sylvester.

- 1, Human skeleton.
- 2, Ditto ditto.
- 3, Skeleton of horse.
- 4, Ditto of buffalo.
- 5, Ditto of rock-snake.
- 6, Ditto of dog.
- 7, Ditto of cat.
- 8, Ditto of two frogs.
- 9, Cranium of shark.
- 10, One prepared snake-skin.
- 11, Shark's teeth.
- 12, Shagreen.
- 13, Specimens of mercurial injection of epididymis.
- 14, Injected foetal circulation.
- 15, Lobes of testis, and corpus highmorianum.
- 16, Stomach of dog.
- 17, Heart of dog.
- 18, Dried œsophagus of snake.
- 19, Dried snake-skin.
- 20, Section of eye of ox.
- 21, Preparation of sclerotic.
- 22, Ciliary body.
- 23, Chroid coat.
- 24, Spleen of cat.
- 25, Genital organs of male cat.
- 26, Cœcum of dog.
- 27, Pancreas of dog.
- 28, Retina and lens.
- 29, Gizzard, and salivary glands of fowl.

- 30, Section of skull, with painted vascular ramifications.
- 31, Stomach and pancreas of cat.
- 32, Fœtus, showing testicle in the loins.
- 33, Cranium of shark.

From Mr. J. Sinclair.

- 1, Large cobra.
- 2, Phoorsa snake.
- 3, Scorpions.

From Student-Apprentice D. O'Neil.

- 1, Two snakes.

The following specimens in wax were prepared by Mr. Townes, of London, and presented by the Honorable Court of Directors:—

Miliaria.

Gangrene.

Pompholyx.

Psoriasis labialis.

Impetigo sparsa.

Ditto scabida (foot).

Melanosis.

Syphilitic lichen.

Lichen circumscriptus.

Porrigo lupinosa.

Eczema solare.

Scarlatina.

Rubeola, complicated with petechiæ.

Scabies.

Lepra.

Lepra syphilitica.

Ditto ditto (blotches).

Ditto alphides.

Ditto nigricans.

Urticaria.

Erythema nodosum.

Variola, adult, 2nd day.

Ditto, ditto, 5th day.

Ditto, ditto, 6th day.

Variola, adult, 7th day.
 Ditto, ditto, 9th day.
 Ditto, infant, 4th day.
 Ditto, ditto, 8th day.
 Ditto, ditto, 10th day.
 Vaccination, 3rd and 4th days.
 Ditto, 5th and 6th days.
 Ditto, 7th and 8th days.
 Ditto, 9th day.
 Ditto, 10th day.
 Ditto, 15th day.

Sycosis.

Varicella.

Prurigo.

Chronic gout (hand).

Ditto (foot).

Scorbutus.

Erysipelas.

Elephantiasis (foot).

Molluscum contagiosum.

Molluscum non contagiosum.

Chronic rheumatism.

Icthyosis.

Normal Structure.

Brain, seen from above.

Brain, vertical section.

Section showing centrum ovale.

Fœtal brain, 6th month, full.

Ditto, between 5th and 6th month.

Ditto, 5th month.

Ditto, 8th month.

Ditto, 9th month.

A series of three models, exhibiting progressive sections of the internal ear.

Series of Diseases of Os Uteri.

1, Prolapsus of cervix, vascular channelled polypus.

2, Nodulated hypertrophy.

- 3, A small vascular polypus.
- 4, A channelled polypus from cervix.
- 5, Malignant ulceration of cervix.
- 6, Fungoid disease of cervix.
- 7, Strumous deposit in glands cervix.
- 8, Vascular, raised, and bleeding granulations of cervix.

J. II. SYLVESTER,
Acting Curator.

APPENDIX CC.

PROCEEDINGS OF THE GRANT COLLEGE MEDICAL SOCIETY, DURING THE SESSION 1854-55.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 8th April 1854, at 8 o'clock p. m.

Present—

Dr. H. Giraud *President.*

Members.

Messrs. J. Peet ; Atmaram Pandoorung ; Narrayen Dajce ; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

A letter was read from the Secretary to the Medical Board, Bombay, presenting to the Society a summary of Reports on the subject of Vaccination.

Dr. Giraud then read a few "Notes on Compound Poisoning, by Opium and Arsenic."

The subject of the case was admitted into the Jamsetjee Jejeebhoy Hospital, labouring under the narcotic effects of opium.

He was treated, as usual, with emetics, cold douche, &c. and whilst under recovery the next day, symptoms simulating those of poisoning by datura were observed.

No symptoms of irritant poison were present: the vomited matter not having been analyzed, the evidence of arsenic having been taken rested upon the patient's statement of having swallowed about a tola weight of powdered arsenic.

After some discussion, Mr. Peet made a few remarks upon some surgical operations, as tracheotomy in croup, &c. A.

resolution was then passed, that certain papers and contributions belonging to the Society be transmitted to the Secretary to the Medical and Physical Society, for notice in their Transactions; and the meeting was adjourned to Saturday the 8th July 1854:

(Signed) H. GIRAUD, M.D.,
President.
 „ S. A. de CARVALHO,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 8th July 1854, at 8 o'clock P. M.

Present—

Dr. H. Giraud..... *President.*
 Mr. Bhawoo Dajee *Vice-President.*

Members.

Messrs. J. Peet; G. R. Ballingall; Atmaram Pandoorung; Anunta Chundroba; Dossabhoy Burjorjee; Narrayen Dajee; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

Letters read :—

1. From Dr. Morehead, presenting a large and valuable collection of books for the Library of the Society.

From the Acting Secretary to the College Council of Education, Madras, presenting a copy of the Annual Report of the Madras Medical College for the Session 1852-53.

The Monthly Returns from the Bandora and Poona Dispensaries, and the Jamsetjee Jejeebhoy Hospital, received during May and June, were laid on the table.

It was then proposed by the President, and seconded by the Secretary, that in accordance with paragraph 3, of the Regulations, Messrs. Ruttonjee Hormusjee, Shamrao Narrayen, Balakrishna Succaram, and Moreshwar Junardhun, the new Graduates of the College, and Drs. Carter, Campbell, and Sylvester,

newly appointed Professors, be nominated candidates for admission to the Society. After which it was announced that the following papers will be read by their respective authors at the following meetings, viz :—

Three cases of Calculus Vesicae in which the lateral operation of lithotomy was successfully performed, with remarks. By Mr. Bhawoo Dajee—in August.

Report of some interesting cases treated at the Jamsctjee Jejeebhoy Hospital. By Mr. Anunta Chundroba.

Some further remarks on Tetanus. By J. Peet, Esq.—in September. The Meeting was then adjourned to Saturday the 12th August 1854.

(Signed) H. GIRAUD, M.D.,
President.

„ S. A. de CARVALHO,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Saturday the 12th August 1854, at 8 o'clock P. M.

Present—

Dr. H. Giraud..... *President.*

Dr. W. C. Coles..... *Vice-President.*

Members.

Messrs. J. Peet ; R. Haines ; Anunta Chundroba ; Narayen Dajee ; Dossabhoy Bazunjee ; Rustomjee Byramjee ; and S. A. de Carvalho, *Secretary.*

Visitor.

J. H. Sylvester, Esq.

The proceedings of the last meeting were read and confirmed.

Letters read :—

1. From Mr. Burjorjee Dorabjee, proposing a change in the day for the Meeting of the Society.
2. From the Acting Secretary to the College Council of Education, Madras, acknowledging with thanks the receipt of five copies of the Society's Proceedings for the last Session.

The Returns received from the Poona, Bandora, and Kurrachee Dispensaries, were laid on the table, and the remarks therefrom read.

The gentlemen proposed at the last meeting were then duly elected Members of the Society, viz :—Drs. Carter, Sylvester, Campbell ; and Messrs. Ruttonjee Hormusjee, Shamrao. Narrayen, Balkrishna Succaram, and Moreshwar Junardhun.

Owing to the unavoidable absence of Mr. Bhawoo Dajee, his brother Mr. Narrayen Dajee read the communication announced ; viz. “ Notes on three Cases of Lithotomy,” successfully operated upon by him.

After a short discussion, the subject of Mr. Burjorjee’s letter was referred to the Committee of Management, and the meeting was adjourned to Saturday the 9th September 1854.

(Signed) H. GIRAUD, M.D.,
President.

„ S. A. de CARVALHO,
Secretary.

A Meeting of the Committee of Management of the Grant College Medical Society was held in the College Library, on Tuesday the 29th August 1854, at 4 o’clock P. M.

Present.

Dr. Giraud ; and Messrs. Atmaram Pandoorung, and S. A. de Carvalho.

The following resolutions were then passed :—

I.—That the day and hour for the monthly meeting of the Society be, for the convenience of the Members, changed to the 2nd Thursday of each month, at 5 o’clock P. M.

II.—That Mr. James Chesson be asked to accept the Agency of the Book Club Society, for the transmission of periodicals, &c. and that the Pharmaceutical Journal be discontinued.

(Signed) H. GIRAUD, M.D.,
President.

S. A. de CARVALHO,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Tuesday the 9th September 1854, at 8 o'clock P. M.

Present—

Dr. W. C. Coles (in the Chair) . . . } *Vice-Presidents.*
Mr. Bhawoo Dajee . . . }

Members.

Messrs. R. Haines ; J. H. Sylvester ; Anunta Chundroba ; Dossabhoy Bazunjee ; Ardaseer Jamsetjee ; Rustomjee Byramjee ; Balkrishna Succaram ; Ruttonjee Hormusjee ; Moreshwar Junardhun ; Narayen Dajee ; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting, and of the Committee of Management, were read and confirmed.

Letters read :—

1. From the Acting Secretary to the College Council of Education, Calcutta, acknowledging with thanks five copies of the Society's Proceedings for the past Session.

From Drs. Campbell and Carter, respecting their election as Members of the Society.

From the Secretary to the Medical Board, Bombay, forwarding Papers and Proceedings of the Epidemiological Society of London, and requesting the attention of the Society thereto.

The remarks from the Bandora, Poona, and Kurrachee Dispensary Returns were then read.

The proposal of the Committee of Management regarding the change in the day and hour for the Society's meetings was then discussed, and it was, with unanimous assent, fixed for the 2nd Tuesday, at 8 o'clock P. M., of each month.

The communication announced was next read by Mr. Anunta Chundroba.

It consisted of notes on six cases of interest, treated by him in the Jamsetjee Jejeebhoy Hospital, with remarks upon each.

After a short discussion, the thanks of the Society were

accorded to Mr. Anunta for his interesting communication, and the meeting was adjourned to Tuesday the 10th October 1854.

(Signed) W. C. COLES, M.D.,
Vice-President, in the Chair.

S. A. de CARVALHO,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Tuesday the 10th October 1854, at 8 o'clock P. M.

Present—

Mr. Bhawoo Dajee (in the Chair)..... }
Dr. W. C. Coles, M.D. } *Vice-Presidents.*

Members.

Messrs. Atmaram Pandoorung ; Anunta Chundroba ; Burjorjee Dorabjee ; Narrayen Dajee ; Shamrao Narrayen ; and S. A. de Carvalho, *Secretary*.

The proceedings of the last meeting were read and confirmed.

The Returns from the following Dispensaries were laid on the table, viz :—

Jamsetjee Jejeebhoy Hospital, Female Out-patient, Bandora, Pona, and Kurrachee.

The Medical Board's letter, forwarding the Proceedings and Papers of the Epidemiological Society, was then discussed, and it was resolved that the Medical Board be informed of the interest the Society has taken in the subject, and its readiness to co-operate with, and forward the Board's wishes.

The following gentlemen were then elected Members of a Sub-Committee, to answer the series of queries transmitted by the Medical Board, viz :—

Dr. Coles ; Mr. Atmaram Pandoorung ; Burjorjee Dorabjee ; Narrayen Dajee ; and S. A. de Carvalho.

The result of their labours to be submitted to the Society

before transmission to the Medical Board ; and the meeting was then adjourned to Tuesday the 7th November 1854.

(Signed) BHAWOO DAJEE,
Vice-President, in the Chair.
 S. A. de CARVALHO,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Tuesday the 7th November 1854, at 8 o'clock P. M.

Present—

Dr. H. Giraud	<i>President.</i>
Dr. W. C. Coles	} <i>Vice-Presidents.</i>
Mr. Bhawoo Dajee	

Members.

Messrs. J. Peet ; R. Haines ; G. R. Ballingall ; J. H. Sylvester ; J. C. Lisboa ; Atmaram Pandoorung ; P. F. Gomes ; Burjorjee Dorabjee ; Narrayen Dajee ; Ruttonjee Hormusjee ; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

Letter read from the Secretary to the Medical Board, Bombay, acknowledging the receipt of the Society's letter, and transmitting some copies of the printed questions on the subject of cholera, from the Epidemiological Society.

The remarks appended to the following Dispensary Returns were read—viz. those of the Male and Female Dispensaries of the Jamsetjee Jejeebhoy Hospital, and those of the Bandora, Poonā, and Kurnachee Dispensaries.

In that of the last, Mr. Lisboa describes a successful operation for cataract in which the lens was absent, and the opaque capsule was attached to the iris by a pedicle.

The Secretary then read notes on three cases of interest treated by him in the Jamsetjee Jejeebhoy Hospital being one of

enteritis, one of gangrene of the lungs, and the third traumatic tetanus, with remarks on each, after which the thanks of the Society were expressed to the author, and the meeting was adjourned to Tuesday the 12th December 1854.

(Signed) W. C. COLES, M.D.,
Vice-President.
 S. A. de CARVALHO,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Tuesday the 12th December 1854, at 8 o'clock P. M.

Present—

W. C. Coles, M.D. (in the Chair).....*Vice-President.*

Members.

Messrs. J. Peet ; Balkrishna Succaram ; Shamrao Narrayen ; and S. A. de Carvalho, *Secretary.*

The proceedings of the last Meeting were read and confirmed.

A letter was read from the Secretary to the Council of the Madras Medical College, presenting two copies of the Introductory Lecture delivered at the opening of the Session 1854-55, by Professor A. Blacklock.

The Dispensary Returns received during the month were laid on the table.

Mr. Balkrishna Succaram then read notes on two interesting cases, one of attempted poisoning by swallowing pounded glass, and the other of acute pericarditis ; both successfully treated by himself.

After a short discussion, the thanks of the Society were expressed to Mr. Balkrishna for his communication, and the meeting was adjourned to Tuesday the 9th January 1855, the Anniversary Meeting of the Society.

(Signed) W. C. Coles, M.D.,
Vice-President.
 „ S. A. de CARVALHO,
Secretary.

Minutes of the Annual Meeting of the Grant College Medical Society, held in the College Library, on Tuesday the 9th January 1855, at 8 o'clock P. M.

Present—

Dr. H. Giraud.....	<i>President.</i>
Dr. W. C. Coles.....	} <i>Vice-Presidents.</i>
Mr. Bhawoo Dajee.....	

Members.

Messrs. J. Peet; Dossabhey Bazunjee; Rustomjee Byramjee; Shamrao Narrayen; Narrayen Dajee; and S. A. de Carvalho, *Secretary.*

The proceedings of the last meeting were read and confirmed.

The Monthly Returns from the Jamsetjee Jejeebhoy Hospital, the Bandora, and Poona Charitable Dispensaries, were then submitted.

In answer to the Medical Board's letter to certain questions of the Epidemiological Society of London, communicated to the Members of the Society, an abstract, prepared by the Sub-Committee from the answers given by the Members appointed for the purpose, viz. Dr. W. C. Coles, Messrs. Atmaram Pandoorung, S. A. de Carvalho, Burjorjee Dorabjee, and Narrayen Dajee, was read before the Society. It was resolved to circulate it to all the Members of the Society, for any additional observations which they may have to make.

The following gentlemen were duly elected Office-bearers for the ensuing year :—

Mr. Bhawoo Dajee.....	<i>President.</i>
Mr. J. Peet.....	} <i>Vice-Presidents.</i>
Mr S. A. de Carvalho.....	
Mr. Narrayen Dajee.....	<i>Secretary.</i>

Mr. Bhawoo Dajee thanked the Meeting for the unexpected honour conferred on him, and conscious as he was of his deficiencies for a post which has been hitherto so ably held, hoped to compensate for them by increased exertion in furthering the objects of the Society.

Mr. Peet had great pleasure in bearing testimony to the able and zealous conduct of Mr. Carvalho, who had just been elected Vice-President.

Mr. Bhawoo Dajee said the testimony to the merits of Mr. Carvalho came suitably from Mr. Peet: he had much pleasure in recording the high estimation in which Mr. Carvalho is held for his amiable and gentlemanly conduct towards his brother associates.

Papers were announced to be read: by Mr. Bhawoo Dajee, in February, "Notes on a Case of Acute Dropsy"; by Mr. Burjorjee Dorabjee in March; and by Rustomjee Byramjee in April.

(Signed) BHAWOO DAJEE,
President.
NARRAYEN DAJEE,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Tuesday the 9th February 1855, at 8 o'clock P. M.

Present—

Mr. Bhawoo Dajee.....	<i>President.</i>
Mr. J. Peet.....	} <i>Vice-Presidents.</i>
Mr. S. A. de Carvalho	

Members.

Drs. W. C. Coles; H. Giraud; R. Haines; and Messrs. Shamrao Narayen, and Narayen Dajee, *Secretary.*

The proceedings of last meeting were read and confirmed.

The Monthly Returns from the Poona, Bandora, and the Jamsetjee Jejeebhoy Hospital Male and Female Dispensaries, were then laid on the table.

Mr. Bhawoo Dajee then read a case of acute dropsy. The case was remarkable, as showing very distinctly the exciting cause of the disease, which was exposure to cold and wet for some days continuously.

The patient was a Bunya boy aged 17 years. The anasarcaous swelling was so great as to oppress the breathing; urine was scanty, and albuminous. Under the microscope, tubes were observed, containing granules in the cavity. After the use of diuretics and tonics he partially recovered.

(Signed) BHAWOO DAJEE,
President.
,, NARRAYEN DAJEE,
Secretary.

Minutes of a Meeting of the Grant College Medical Society, held in the College Library, on Tuesday the 6th March 1855, at 8 o'clock P. M.

Present—

Mr. Bhawoo Dajee *President.*
Mr. J. Peet. }
Mr. S. A. de Carvalho .. } *Vice-Presidents.*

Members.

Dr. H. Giraud; Messrs. Rustomjee Byramjee; P. F. Gomes; Dossabhoy Bazunjee; Moreshwar Junardhun; and Narayen Dajee, *Secretary.*

The proceedings of the last meeting were read and confirmed.

The Monthly Returns from the Jamsetjee Jejeebhoy Hospital Male and Female Dispensaries, the Nagdave, Bandora, and Poona Charitable Dispensaries, were then laid on the table.

Mr. Dossabhoy Bazunjee then read a case of remittent fever, with remarks on headaches depending on functional and organic causes, and the subject was discussed in regard to the difficulty that sometimes occurs in the treatment of such cases.

Mr. Bhawoo Dajee then read a case of poisoning by opium, in which the patient died ten hours after taking the poison. In this case the stomach-pump was used three hours after the taking of the poison, and a quantity of fluid, strongly smelling of opium, was drawn off by one of Weiss's patent stomach-pumps.

He then read a case of chylo-serous urine, in a Parsee female of weak constitution, and of hysterical habits. The urine coagulated spontaneously ; it was of a milk-white colour, and of sp. gr. 1·020. The patient improved under the administration of bitter tonics, and preparations of iron.

A case of cholera, the first observed during the season, was then read. The patient, a Bunya broker, lived behind the Moombadave Chowkey, and was attacked with diarrhoea on the night of 21st February. He had that evening partaken of large quantities of milk and potatoes at a party. There was collapse ; he had severe cramps, and suppression of urine. Under the administration of acetate of lead, and latterly of calomel, and spirit. ammon. aromaticus, the application of mustard poultices, and the use of cold drinks, he gradually recovered.

(Signed) BHAWOO DAJEE,

President.

„ NARRAYEN DAJEE,

Secretary.

APPENDIX DD.

ACCOUNTS OF THE ANDERSON, REID, FARISH, AND
CARNAC SCHOLARSHIP FUNDS; OBSTETRIC
INSTITUTION FUND; AND SIR JAMSETJEE JE-
JEEBHOY MEDICAL BOOK FUND, AND MEDICAL
PRIZE FUND.

Dr.

Anderson Scholarship Fund.

Cr.

1853.		Amount. Rs. a. p.	days	Interest. Rs. a. p.	1853.		Amount. Rs. a. p.	days	Interest. Rs. a. p.
May 5th	To Cash paid the Principal Grant Medical College, on this account ...				May 1st	By Balance.....	12,970 6 8	365	778 3 7
June 14th	Ditto	32 8 0	361	1 14 10	1854.				
July 1st	Ditto	97 8 0	321	5 2 3	Apr. 30th	By Difference of Interest at 6 per cent. per annum	753 9 10		
Aug. 3rd	Ditto	65 0 0	304	3 3 11					
Sept. 1st	Ditto	65 0 0	271	2 14 3					
Oct. 4th	Ditto	65 0 0	242	2 9 3					
Nov. 4th	Ditto	65 0 0	209	2 3 8					
Dec. 1st	Ditto	65 0 0	178	1 14 5					
		65 0 0	151	1 9 9					
1854.									
Jan. 3rd	Ditto	65 0 0	118	1 4 2					
Feb. 1st	Ditto	65 0 0	89	0 15 2					
Mar. 1st	Ditto	65 0 0	61	0 10 5					
Apr. 10th	Ditto	65 0 0	21	0 3 7					
		780 0 0		24 9 9					
		12,944 0 6		753 9 10					
30th	To Balance.....								
		13,724 0 6		778 3 7		Rupees	13,724 0 6		778 3 7

Dr. Obstetric Institution Fund, bearing Interest at 4 per Cent., as per G. O. of 10th Aug. 1853. Cr.

1854.	Amount. Rs. a. p.	days	Interest. Rs. a. p.	1853. May 1st	By Balance.....	Amount. Rs. a. p.	days	Interest. Rs. a. p.
Apr. 30th To Balance.....	13,639 3 5	365	516 11 7	1854. Mar. 17th	By Cash received from the Principal Grant Medical College, on this account	12,889 7 4	365	515 8 3
						233 0 0	45	1 2 4
				Apr. 30th	By Amount of Interest	516 11 7		
	Rupees 13,639 3 5		516 11 7		Rupees	13,639 3 5		516 11 7

Dr.

Sir Jamsetjee Jejeebhoy Medical Book Fund.

Cr.

1853.	Amount. Rs. a. p.	days	Interest. Rs. a. p.	1853.	Amount. Rs. a. p.	days	Interest. Rs. a. p.
May. 1st To Cash paid on the 8th July 1852 to Mr. J. J Bocarro, on this account.	477 3 0	662	43 4 4	May 1st By Balance.....	11,317 13 9	305	565 14 3
Aug. 22nd To Cash paid to the Principal Grant Medical College, on this account.	459 7 0	252	13 13 9	Apr. 30th By Difference of Interest at 5 per cent. per annum.....	506 12 2		
1854.							
Apr. 30th To Balance	10,887 15 11		506 12 2				
	Rupees 11,824 9 11		565 12 2		Rupees 11,824 9 11		565 14 3

Dr.

Sir Jamsetjee Jejeebhoy Medical Prize Fund.

Cr.

1853.	Amount. Rs. a. p.	days	Interest. Rs. a. p.	1853.	Amount. Rs. a. p.	days	Interest. Rs. a. p.
May 1st To Cash paid on the 7th July 1852 to C. Morehead, Esq., on this account				May 1st By Balance	5,721 0 9	365	286 0 10
„ 25th To Cash paid to the Principal Grant Medical College, on this account	250 6 0	663	22 11 2	1854.			
1854.				Apr. 30th By Difference of Interest at 5 per cent. per annum	251 10 10		
Apr. 30th To Balance	250 0 0	341	11 10 10				
	5,472 11 7		251 10 10				
Rupees	5,972 11 7		286 0 10	Rupees	5,972 11 7		286 0 10

Bombay, Accountant General's Office, 30th April 1854.

(Errors excepted)

(Signed) E. E. ELLIOT, Accountant General.

(True copy)

JOHN PEET, Acting Principal, Grant Medical College.

APPENDIX No. XXXI.

LETTER FROM GOVERNMENT IN REPLY TO REPORT.

No. 1947 OF 1855.

GENERAL DEPARTMENT.

To M. STOVELL, Esq.,

Secretary to the Board of Education.

SIR,

I am directed by the Right Honorable the Governor in Council to acknowledge the receipt of the Report of the Board of Education, with appendices, which has accompanied your letter No. 403, dated 18th May 1855, and to request that the Board will take early measures for having these valuable papers printed on account of Government.

2. It is but natural (I am desired to state) that His Lordship in Council should regard this report with feelings of a mixed nature,—*regret* that it must be the last of a series of narratives which have formed the record, not only of the progress of instruction among the people of this Presidency during the last fifteen years, but of the honest and untiring zeal for this great object, which has always characterized the Board of Education, whose separate administrative functions have now ceased ;—*gratification* that, in receiving the Board's resignation of these functions, he can assure its Members that they have merited and obtained the approbation of the Government, as well as of the community ;—and *hopefulness* as regards the results to be expected from the great and comprehensive system in which the Board of Education will be absorbed, but in which, though losing its distinctive shape and separate being, its spirit will continue to work as heretofore.

3. To the Members of the Board, also, the official year just closed has been one of varied interest. Within the past few months Government have had occasion to sympathize with them on two subjects of a very opposite nature : on the one hand, the loss of two colleagues, both gentlemen of conspicuous zeal and earnestness in the cause of education, and one of them a man whose name will long remain, as it long has been, a household word among those who have at heart the enlightenment of every class of people in this country ; on the other hand, the bright prospect which has been opened to the progress of such enlightenment by the guarantee of extended education for the people of India, which is involved in the wise and generous scheme of general instruction lately matured by the Court of Directors.

4. With respect to the Board's detail of the progress of the Educational Department during the past year, and the several interesting statements submitted among the appendices of their report, in illustration of this subject, I am directed to state, that Government consider their proceedings as remarkable for the same activity and good judgment which have ever characterized the working of the Department. The consequences of the introduction of new principles, in those instances where the changes introduced by the Board have had time to develop their effects, are gratifying, and the general result of operations eminently satisfactory.

5. The condition of the Educational Funds is considered by Government to afford evidence of prudent and careful management on the part of the Board.

6. The attention of the Director of Public Instruction will be requested to the general principle discussed in the 23rd paragraph of the Board's report. His Lordship in Council fully agrees with them in their opinion on this subject, the correctness of which he considers to be shown, not less by the retrogressive state of the Broach School, referred to at paragraph 68 of the report, than by the more gratifying result shown, at the close of paragraph 9, to have followed the introduction in other cases of the system of which they approve.

7. Government will watch with interest the progress of the several Normal Classes, which have deservedly engaged the

attention of the Board, and will deserve that of their successor. The addition to the number of Vernacular school-books, which forms the subject of paragraphs 16 to 21, will, the Right Honorable the Governor in Council is confident, greatly assist the progress of these classes, as well as the instruction of ordinary students; and Mr. Graham will have merited the especial thanks of the community of Guzerat, when he shall have satisfactorily completed the important and difficult task which he has undertaken, in providing them with translations of the scientific works enumerated by the Board.

8. With respect to the additions to the School course of teaching, which are described in the 28th paragraph of the Board's report, Government consider them highly judicious, as they will not only inform the rising generation as to the method by which some of the most important branches of Government administration are conducted, but will give students the opportunity of qualifying themselves, without any interruption of their general education, and sooner than they otherwise could do, for Government employment,—the destination to which a large proportion of the scholars in schools of all classes will naturally, and with propriety, look forward.

9. The Governor in Council regards with deep interest every measure which tends to open the Public Service to the students of our educational institutions; believing that not only the Service will profit by the more extended introduction into it of a class of Native officers of really liberal education, but that the extension of such education generally among the people will be furthered by a provision, which will prevent it from being any longer enough that candidates for certain Government offices should be possessed only of that routine and technical aptitude, which may be picked up by men of no general information, but will insist on their possession of a degree of useful general education, which they can only acquire by a course of sound educational training. With regard to the services and claims of those who have already entered the Public Service, this most desirable principle must be introduced considerably, and by degrees; but His Lordship in Council hopes that it may at once be so far established, that it will have the effect of making

it evidently more for a young man's interest to complete his education thoroughly, than to abandon his school, and seek for Government service, as soon as he can discharge the duties of an ordinary clerk.

10. He hopes, too, that the combined effect of this scheme, and of the alteration of the rule described in appendix No. XVII., which has removed the limitations of salary, formerly existing, and made it incumbent on appointing officers to fill certain vacancies, of *whatever amount*, from among candidates certified by the Head of the Educational Department as qualified, will cause returns of appointments made under it, in future years, to be much more voluminous documents than that which forms appendix No. XXIII. of the Board's present report. This rule, however, Government consider may be still further improved, by the introduction, among the requisite qualifications for certain offices, of an acquaintance with the principles of Political Economy, and by otherwise raising the text of qualification for the more important situations which it is intended to throw open.

11. The establishment of the low-caste School at Ahmednugur is an interesting event, and Government are glad that they can congratulate the Board of Education on having had the satisfaction of aiding in such an undertaking. The Right Honorable the Governor in Council is sure that it will be an additional satisfaction to the Board to learn that he has lately been enabled, principally by the co-operation of the Duxina Prize Committee, to offer to the founders and supporters of the School instituted some years ago for the children of the lowest castes in Poona, the means of providing suitable accommodation for its classes.

12. With reference to the 29th paragraph of the Board's report, I am directed to inform them that Government recognize the usefulness of Native libraries, under good management, as an important means of enlightenment among the people. They have lately provided the Director of Public Instruction with ample means for assisting such libraries at the Presidency; and on the success of the measures which he adopts for doing so being apparent, will be ready to extend them to the district library associations, several of which have applied for and received the

assistance of Government, as well as that of the Board of Education, during the past and previous years.

13. The Right Honorable the Governor in Council has directed me to state, with regard to the several particular institutions, the Board's notice of which (illustrated by the appended narrative reports of the managing local authorities) is contained in the 32nd and following paragraphs of their report, that were Government to now record a separate notice of all that calls for their approbation, this letter must separately refer to almost every sentence in that division of the report which touches upon each institution. He desires rather that you will convey to the Board the thanks of Government for all that they have done towards improving the efficiency of each institution, and that similar thanks may be communicated to those officers connected with the institutions in question, to whose efficient co-operation their improvement is attributable, and whose services have been noticed in such gratifying terms at the close of the Board's report. These officers will still remain at their posts, and Government will confidently look to them to carry on, and extend, with the enlarged opportunities which they will have under the new system, those efforts which have been so successful, in proportion to the opportunities afforded, by that under which they and the Board of Education have hitherto worked in concert.

14. There are, however, some points regarding which Government consider it necessary that this letter should contain a few short observations in addition to the preceding paragraphs.

15. The Board's notices of the Elphinstone Institution and Poona College both open with expressions of regret for the loss of valued Professors. With respect to their remarks regarding Mr. Reid, I am directed to inform them, that as the correspondence between Government and the Perry Testimonial Committee has resulted in the nomination of Mr. Reid as a Professor in the Elphinstone Institution, under the designation of "Perry Professor of Jurisprudence," the College will recover the benefit of his valuable assistance; and with regard to the Reverend Mr. Fraser, though his removal from the Government Educational Department is a loss to the Poona College, his present important position in an institution which his Lordship in Council has hopes

of seeing ere long affiliated to the University, and recognized as one of the established educational institutions of the country, prevents his transfer from the Government Service from being regarded as a loss to the community at large: there can be no doubt that a very worthy section of it have gained greatly by the transfer.

16. Government have also directed me to congratulate the Board of Education on having seen, in the honorable distinction lately conferred on Mr. Dadabhai Naorojji, a fulfilment of the hope referred to in their 34th paragraph as having been expressed when, nearly thirty years ago, the Professorships, one of which he now holds, were first established.

17. Some of the most important events connected with the Grant Medical College have already formed the subject of correspondence with Government, who have expressed their gratification in the management of the institution; the only material drawbacks to the satisfaction which His Lordship in Council has experienced from reading the report, for which he has to thank the Acting Principal and Professors of the College, being the disappointment of the Principal's expectations as to the progress of vaccination, and the breach of discipline on the part of some of the Student-Apprentices attached to the Jamsetjee Jejeebhoy Hospital,—an example of misconduct which Government trust may not again occur.

18. I am also directed to state, that there are several important subjects referred to in different parts of the papers now submitted to Government, which—though it has not been considered necessary to notice them particularly in this letter—will merit the early attention of the Director of Public Instruction, and will be brought to his notice. Among such subjects I am to instance that of the 91st paragraph, and the suggestion contained in the 78th paragraph of the Board's report.

19. In conclusion, I am instructed to convey to you, personally, the thanks of the Right Honorable the Governor in Council, for the unvarying and earnest attention with which you have always discharged the duties which have fallen to your share during your long connection with the Board of Education. His Lordship in Council is aware that these have been duties of a more

responsible nature than would have fallen upon a person discharging the usual functions of a mere Secretary, and he has the greatest pleasure in assuring you of his entire concurrence in the sentiments expressed regarding you in the Board's letter No. 407, dated 21st May, and accompaniment, a copy of which he begs may be printed, along with this letter, as an additional appendix to the Board's last annual report.

I have the honor to be,

Sir,

Your most obedient Servant,

(Signed) W. HART,

Secretary to Government.

Bombay Castle, 9th June 1855.

Copy of the letter from the Board of Education, No. 407, dated 21st May, and its accompaniment, directed by Government, in the concluding paragraph of the above communication, to be printed.

NO. 407 OF 1855.

TO W. HART, Esq.,

Secretary to Government, General Department.

Board of Education, Bombay, 21st May 1855.

SIR,

We, the undersigned Members of the Board of Education, have the honor to enclose the accompanying copy of a Resolution passed by us, for submission to the Right Honorable the Governor in Council, and we trust that his Lordship in Council will be pleased to acquiesce in the request made therein.

We have the honor to be,

Sir,

Your most obedient Servants,

(Signed) METCALFE LARKEN,

„ JUGONNATH SANKERSETT,

„ BOMANJEE HORMUSJEE,

Members of the Board of Education.

Copy of a Resolution passed by the Members of the Board of Education, on May 21st, 1855, relative to Dr. STOVELL, Secretary to the Board.

RESOLUTION.

The general duties of the Board having been transferred to the Director of Public Instruction, the Members present desire to record their best thanks to Dr. Stovell, the Secretary, for the constant assiduity he has bestowed upon the transaction of the business of the Board.

The Members present do not hesitate to record their belief, that the advancement of Education in Western India, during the last ten years, is attributable, to a very great extent, to Dr. Stovell's energy, intelligence, and judgment.

As the expression of this belief could not, properly, have been included in the Board's late report (submitted to Government with letter No. 403, of 18th instant), which bears the signature of the Secretary, the Members present determine to submit a copy of their Resolution to the Right Honorable the Governor in Council, with the hope that Government will suitably acknowledge Dr. Stovell's services.

(Signed) METCALFE LARKEN,
 „ JUGONNATH SANKERSETT,
 „ BOMANJEE HORMUSJEE,
Members of the Board of Education.

